Chapter Five

The Ardennes

The German surprise attack in the early morning hours of December 16, 1944, quickly turned into far more than the spoiling action about which Third Army intelligence officers had worried for the past several weeks. Instead, three Nazi armies launched a 20-division assault along a 60-mile front opposite the Ardennes forest region in southern Belgium and northern Luxembourg. Defenders of this area held by First Army's VIII Corps was comprised of, as one observer phrased it, "dirt farmers and shoe salesmen." The success of the German onslaught ended General Eisenhower's own ambitious plan for a winter offensive. Planned offensives by First Army in the direction of Cologne and by Third Army in the Saar had to be abandoned to combat the German menace at the Allied center, a bitter struggle that became known as the Battle of the Bulge.[1] When Eisenhower met with key Allied officers at Verdun three days after the initial German attack, he declared the grave military situation to be "one of opportunity for us and not [one] of disaster." Although his audience may have found it difficult to embrace such a view at that moment, Eisenhower's perception proved absolutely correct. In the end, Germany's Ardennes Offensive, Operation Herbstnebel (Autumn Fog), ended in overwhelming defeat, leaving West Wall defenses woefully depleted before a renewed Allied attack.[2]

The Ardennes Offensive also provided Allied air power with an opportunity to demonstrate its capability in a defensive emergency. Never before in northern Europe had tactical military forces been called on to meet a major threat without benefit of extensive prior planning between air and land commanders. It would prove a test worthy of tactical air power and of the air-ground teamwork demonstrated a few months earlier in France. Although the Allied aerial response was applied theaterwide, Weyland's XIX TAC faced challenges at the cutting edge of Patton's celebrated counterattack to relieve Bastogne and drive German forces out of the Bulge.[3]

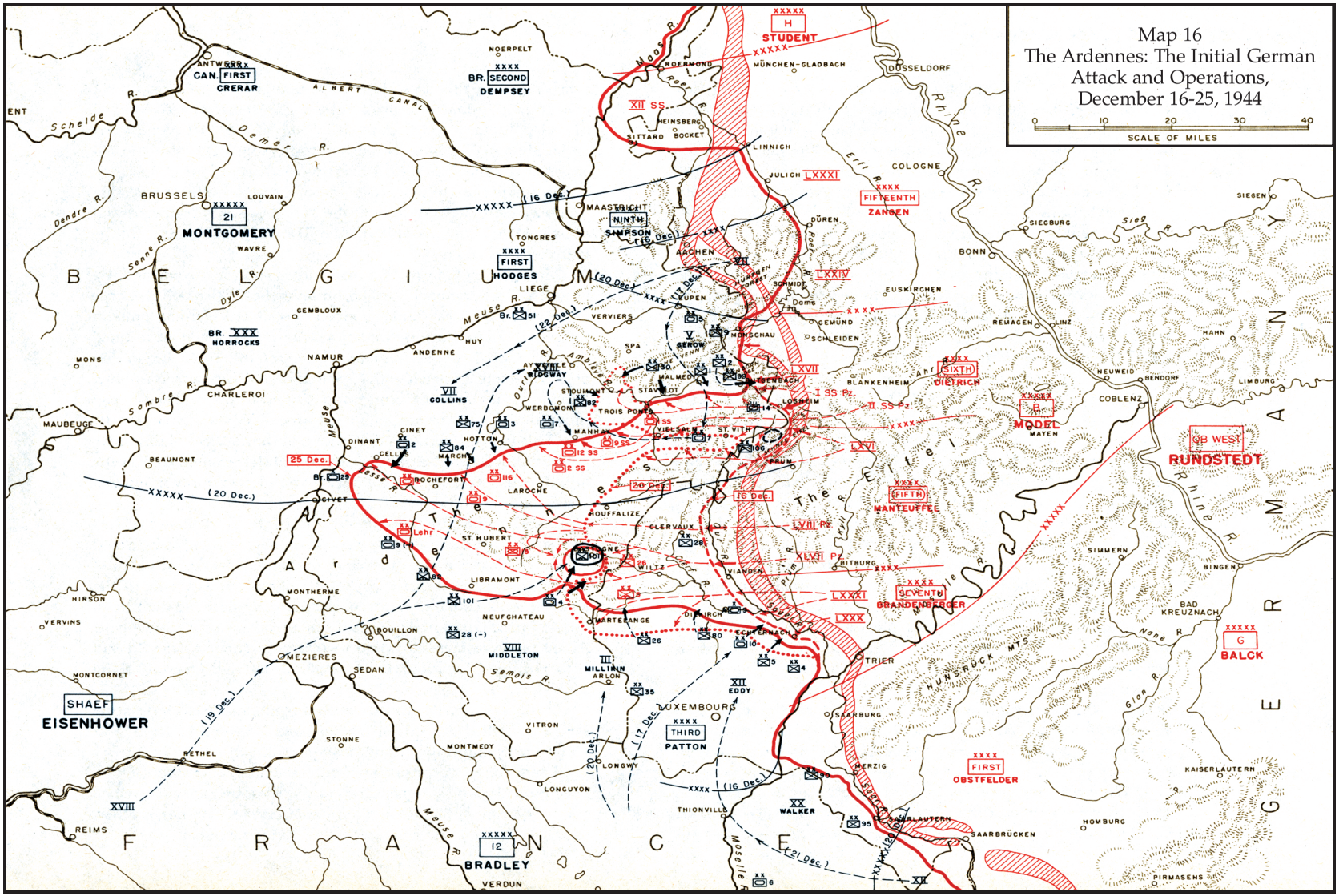
Weyland played a pivotal role in directing tactical air operations in the southern half of the Bulge. Yet, popular attention is fixed most often on Patton's dramatic 90-degree turn north, and in the air, on Quesada's direction of air support in the northern area of the Bulge. Nevertheless, for both Third Army and its air arm, the Battle of the Bulge in many ways represented their greatest triumph of the European Campaign.

Operation Autumn Fog

On December 16, 1944, in the initial confusion and fog of battle, the true nature of Operation Autumn Fog remained unclear. If Allied leaders had correctly identified Adolf Hitler rather than Field Marshal Gerd von Rundstedt as the architect, they might have better reacted to a surprise attack of such a size and stunning boldness. Since September, Hitler had brooded about a German counterattack out of the Ardennes against Allied forces reminiscent of Operation Fall Gelb, the invasion of France in mid-1940. If in late 1944 German forces could reach the Belgian port of Antwerp, 100 miles in the distance, they would split the Allied line and be in position to destroy American and British troops to the north by trapping them against the English Channel and North Sea. If less than completely successful, so audacious an assault would nevertheless gain precious time and disrupt the anticipated Allied offensive against the Siegfried Line.[4]

Operation Autumn Fog called for the main attack to be delivered in the north along the Malmedy-Liege axis to Antwerp by the Sixth Panzer Army, led by SS Gen. Sepp Dietrich. It had the narrowest front of the attacking forces, and much would depend on access to the road network to sustain the drive (**Map 16**). In the center, General von Manteuffel's Fifth Panzer Army had the task of seizing the key road communications centers of St. Vith and Bastogne, and of pushing on to the Meuse River before turning north. To the south, the Seventh Army, commanded by Gen. Eric Brandenberger, would provide flank

Field Marshal Gerd von Rundstedt with Adolf Hitler



SOURCE: Vincent J. Esposito, ed., *West Point Atlas of American Wars*, V. 2, Map 61, (New York: Praeger, 1960)

protection to the Fifth and expand into northern Luxembourg. To further the drive, the Germans formed special parachute units to seize key road junctions and serve as blocking forces, while Lt. Col. Otto Skorzeny's U.S.-uniformed guerrillas would sow confusion behind Allied lines and take control of the Meuse bridges. The *Luftwaffe's* aerial striking force, meanwhile, had been secretly expanded to some 2,400 tactical aircraft for the campaign and moved to bases in the Rhine valley. The mission was to provide close air support for the attacking armored and infantry units in the breakthrough area. Whether an air force by now trained largely in air defense interception tactics could achieve success in ground attack operations without first attempting to gain air superiority remained to be seen. Like the entire operation, much would depend on deception, surprise, and the weather.[5]

The failure of Allied intelligence to comprehend the marshaling of German forces has remained one of the most controversial aspects of the campaign. Although it is difficult to avoid blaming American and British commanders and their intelligence officers, one must admire the German deception operation that included a massive buildup in the Eifel region without the Allies suspecting its true nature. The Allies identified Dietrich's headquarters near Cologne in the fall, and the Germans made every effort to give it a defensive

Gen. Hasso von Manteuffel, commander, Germany's Fifth Panzer Army

appearance against First Army's expected offensive. Then, at the last minute, Dietrich's Sixth Panzer headquarters secretly moved to the Eifel. Similarly, the Fifth German Army moved into the heavily wooded Eifel under a cover plan that called for counterattacking the First Army's offensive to the north. Only top-level *Wehrmacht* officers knew the true nature of the plan, while their forces developed elaborate measures of camouflage and followed strict radio discipline. By mid-December 1944, sufficient fuel and supplies had accumulated and forecasters predicted a spell of much-needed foul weather. In the course of three nights, the attackers quickly moved into place and prepared to strike. The deception achieved complete success.[6]

In hindsight, many indications from Ultra and other intelligence sources pointed to an impending German offensive. In mitigation, it is often argued that bad weather prohibited sufficient air reconnaissance of the buildup area, especially on the eve of the assault. Despite terrible weather, however, tactical reconnaissance flights from at least one of the two photo reconnaissance groups covered the Eifel and the Rhine River valley on all but one day preceding the attack. On five of those days, including December 14 and 15, all flights reported heavy road and rail traffic into the region. As for the XIX TAC, it experienced only two days before the sixteenth when flying proved impossible, and its focus on armed reconnaissance missions provided sufficient opportunity to appreciate the heavy rail traffic west of the Rhine. Even with inconsistent reports, there could be little doubt of a major deployment taking place. Third Army analysts had studied rail movement since mid-November 1944, and understood the direction and general size of the rail transport activity, but they thought about the movement mainly in terms of a German spoiling attack that might be launched from the Eifel against either the First or the Third Army front. Moreover, the Germans communicated over land lines and avoided the radio. Thus, Ultra intercepts remained silent on the Germans' true purpose for the buildup, and with a traditional army officer, von Rundstedt, assumed to be in charge, it made perfect sense to overlook the Ardennes as the center of German interest. Not only did its hilly terrain seem especially unsuitable for armor operations in winter, but the Germans could hardly be expected to attack through the Ardennes a second time.[7]

Given the inability of the Allies to be strong everywhere on the western front, they weakened what appeared to be the most secure sector, the center. It would have taken more to alter Allied preconceptions about German intentions than the intuition of General Patton, who in late November 1944, recorded in his diary, "the First Army is making a terrible mistake in leaving the VIII Corps static, as it is highly probable that the Germans are building up east of them."[8] Indeed, as one authority on the Ardennes Offensive remarked, "the Americans and British had looked in a mirror for the enemy and seen there only the reflection of their own intentions."[9] In fact, on December 16, 20 divisions from three German armies confronted only four Allied divisions

deployed along an 80-mile front between Monschau on the north and Trier on the south. When it struck that day, the *Wehrmacht* directed the brunt of its attack against the line held by a combination of recently arrived green or else battle-weary troops of General Middleton's VIII Corps (**Map 16**). German artillery barrages followed by a heavy infantry assault broke the line of the Allied defense for rolling armored spearheads. The next few days became desperate ones for the Allies.[10]

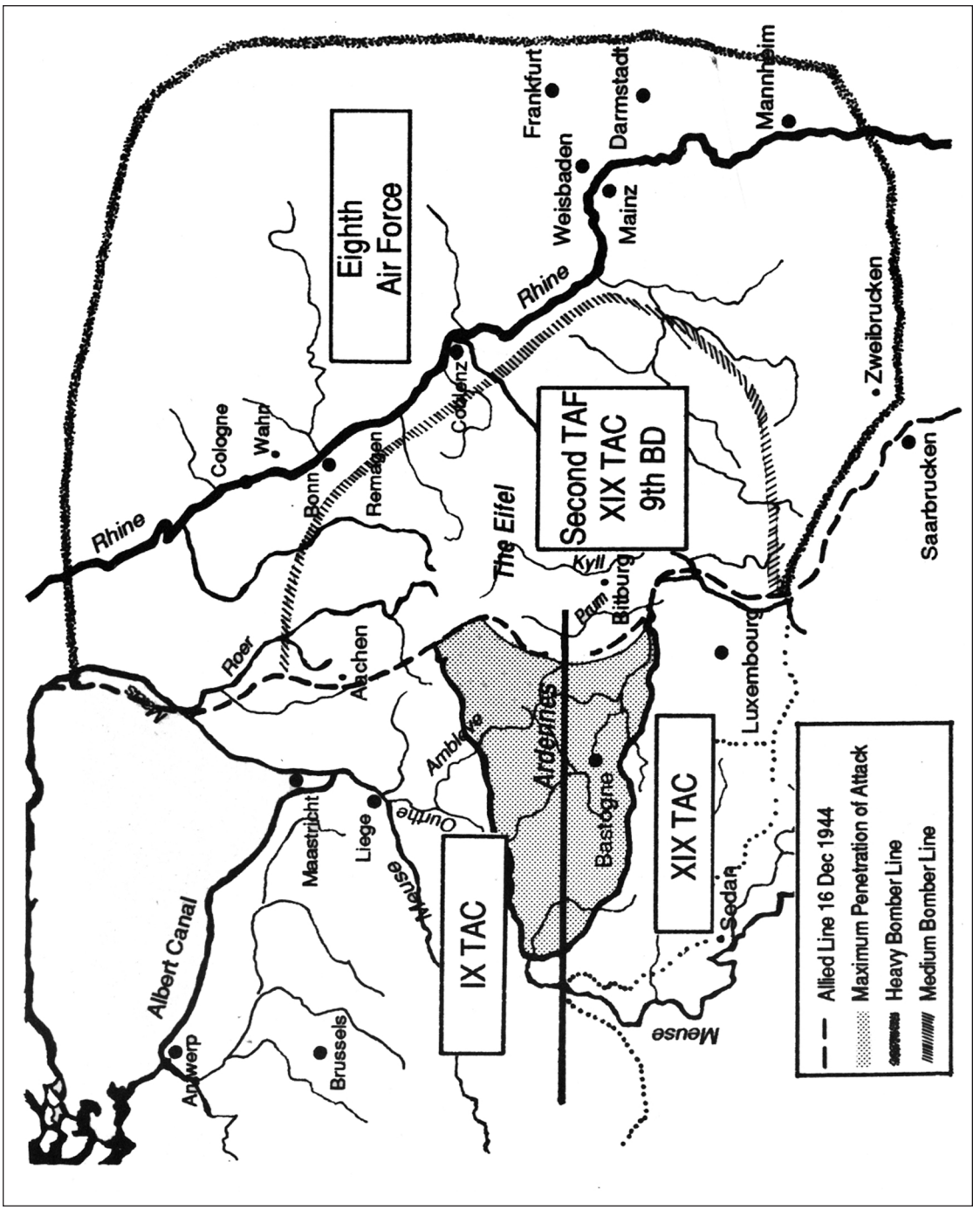
The Allied Response

On December 16, 1944, Allied air forces possessed a significant numerical advantage over the *Luftwaffe*. Ninth Air Force had deployed in the field nearly 1,000 fighters and fighter-bombers in three tactical air commands; two were mostly to the north, in Belgium, while the XIX TAC was south of Luxembourg, in France (**Map 17**). Fighters from other Allied air commands brought the Allies' total to just over 4,000 available front line fighter aircraft, nearly double the available *Luftwaffe* deployment. Much would now depend on how Allied air leaders used their superior force.[11]

The official Ninth Air Force account of the campaign asserts that the tactical air forces pursued three objectives in reacting to the German offensive on December 17: first, maintain air supremacy and prevent the *Luftwaffe* from supporting German ground forces; second, destroy the enemy's main combat elements, such as the tank and artillery forces that propelled the advance; and third, strike at the enemy's means of supply, including bridges, rail yards, supply depots, and communications centers to isolate the breakthrough area. This final objective drove enemy supply lines farther back from the battle area and made them more vulnerable to subsequent Allied air assault.[12]

In the emergency, close air support, which claimed third-priority in the tactical mission hierarchy, took precedence over interdiction.[13] One might argue that, at first, close air support even held priority over air superiority in the desperate attempt to blunt the German drive and confine it to manageable proportions. At the same time, the Ninth Air Force did not need to specifically target the German air force in the Ardennes region because the *Luftwaffe's* determination to provide cover to its attacking forces reopened the contest for air supremacy in the battle zone. Thus, close air support missions almost invariably resulted in first-priority counterair contests as well.[14]

This was certainly the case for General Weyland's forces on December 17. His response to the call for assistance was immediate and overwhelming. Taking advantage of unexpected good weather, every group in the command flew what they termed ground-force cover missions in support of VIII Corps units. At day's end, the fighter-bombers had flown half of their 356 total sorties in support of ground forces in the Ardennes breakthrough area, west of the



Map 17
Air Assignments for the Ardennes Counterattack December 1944

Reprinted from: Col. William R. Carter, "Air Power in the Battle of the Bulge: A Theater Campaign Perspective," *Airpower Journal*, III No. 4 (Winter 1989): 23.

Our and Sauer rivers along the German border. The remaining sortie figure reflected close support and interdiction missions in support of limited-objective operations by XX Corps and XII Corps, which at this time continued preparations for the soon-to-be canceled Operation Tink.[15]

The *Luftwaffe* made a strong presence on that December day with an estimated 600 sorties flown in support of the armored breakthrough and airborne landings. Both sides suffered high losses. Weyland's fighters claimed 24 enemy aircraft destroyed for a loss of nine of their own. General Quesada's forces, which had major responsibility for supporting First Army operations, claimed 49 destroyed and another 35 damaged. Even the reconnaissance pilots got in on the action when the 15th Tactical Reconnaissance Squadron's crack pilot, Capt. John H. Hoefker, returned with three and a half planes claimed. Ground air defense units tallied an additional 54 aircraft shot down. The next day, the *Luftwaffe* appeared in force again at the Ardennes front and once more suffered heavy losses—50 to Allied fighters and 51 to antiaircraft fire. After December 18, the *Luftwaffe* would never again attempt another large-scale air support effort for its ground forces in the Bulge.[16]

The Allies achieved immediate air supremacy in the battle zone less by conscious design than as a by-product of the close support missions. Not that the German Air Force did not remain a menace. Instead of fighter-bombers, Allied air leaders assigned medium and heavy bombers the counterair mission of striking nearby *Luftwaffe* bases. Nevertheless, fighter-bombers frequently attracted *Luftwaffe* attention while supporting ground forces or while on interdiction missions beyond the Ardennes. In fact, the experience of the 406th Tiger Tamers proved representative. Its 513th Fighter Squadron, flying a ground support mission on December 17, received orders to assist P–38s in a dogfight with six FW 190s. After jettisoning their bombs, the Thunderbolt pilots entered the fray and claimed three enemy aircraft destroyed. Of course, this encounter meant that the 513th aircraft did not bomb targets in support of ground forces, a dilemma that persisted throughout December when the *Luftwaffe* remained most active.[17]

The outstanding aerial effort on December 17, however, could not be repeated for the next five days because the Germans received the bad weather that facilitated their plans. Like Lorraine, weather became a determining factor in the air portion of the Ardennes Campaign. Only a squadron-sized mission on December 18 and 19 by the 354th Fighter Group broke the frustrating pattern. Yet, the 354th Pioneers found the *Luftwaffe* dangerous on both occasions. On the eighteenth, one of its squadrons attacked a force of 12 FW 190s bombing First Army troops east of Duren. Although it claimed four of the enemy aircraft destroyed, it lost two P–47s of its own. The next day an estimated 70 FW 190s attacked another Pioneer squadron after bombing a marshaling yard, and the American pilots counted nine enemy fighters down at a cost of three of their own. Despite the losses, General Weyland was pleased

with the performance of his newly equipped P–47 outfit; that evening he lauded the Group "on [a] fine beginning with P–47s." All further flying by the command until December 23 supported XII Corps, which remained in position opposite the Zweibruecken area prior to its emergency redeployment north.[18]

While bad weather during the next five days prevented effective aerial operations, Allied leaders developed their strategy, prepared the necessary command and control measures, and readied their forces for a counteroffensive. On December 18, General Eisenhower alerted Patton to postpone Operation Tink and be prepared to counterattack against the expanding German salient. The situation on the ground quickly became critical for VIII Corps, as a German Panzer corps rapidly moved to reach the key communications center of Bastogne before the 101st Airborne Division arrived there in

4th Armored Division vehicles move past wrecked American equipment, Bastogne (above); tanks of the 4th Armored Division in the Luxembourg area used as artillery fire on German positions (below)

force. The Germans lost that close race the next day, the nineteenth, but they captured Houffalize 18 miles to the north. By December 21, they would surround the 101st Airborne Division, elements of the 10th Armored Division, and various other units at Bastogne.[19]

Early on the morning of December 19, Patton directed his 4th Armored and 26th Infantry Divisions to begin moving into the III Corps area 30 miles north.[20] Later that day, he joined Eisenhower and Bradley at Verdun, where the Supreme Commander outlined his plan, first to blunt and then turn back the assault (**Map 16**). The western tip of the German attacking force was to be prevented from crossing the Meuse. With the northern and southern shoulders of the salient confining the width of the breakthrough, the Allies would seal the northern part of the Bulge and counterattack in the south. Allied leaders adjusted the boundaries accordingly. General Devers's 6th Army Group would move up to replace Third Army's XII Corps in Lorraine, while Patton assumed command of VIII Corps and headed north with two attacking corps. Once his forces had secured Bastogne, he would attack northeast in the direction of Houffalize and eventually cut the salient in two.[21]

At this meeting, Patton electrified those present by promising to move his forces northward and be positioned to counterattack within 48 hours. Although he had directed his staff to prepare for this eventuality, it nonetheless meant shifting an entire army, solving enormous logistics problems, and arranging complex movement schedules during brutal winter weather. Patton and the men of his command succeeded, and the move remains today as one of the great feats of military history. As his biographer observed, "it was an operation that only a master could think of executing."[22]

General Weyland did not react as swiftly. On that day, December 19, he still hoped to salvage Operation Tink. Like many others, he had been slow to appreciate the gravity of the German attack. One can also understand his reluctance to abandon the plan he had helped fashion and believed would lead to a breach of the Siegfried Line. Certainly his conversation with General Quesada that afternoon, when they used special encrypted communications for the first time, could have left him in little doubt about the seriousness of the situation. That evening, after General Vandenberg notified him of Operation Tink's cancellation, he requested reinforcements for his command—three additional fighter groups and another reconnaissance group. He soon received nearly all of the forces that he requested.[23]

Ninth Air Force planners, meanwhile, continued developing an air plan based on requests from 12th Army Group, which focused on attacking German armored elements, isolating the Ardennes-Eifel region from rail support, harassing road traffic inside and outside the Bulge, and eliminating resupply facilities immediately beyond the Ardennes. This basic plan would remain unchanged. It called for medium bombers to concentrate on supply facilities such as bridges, railheads, and communications centers with the objective of

forcing enemy supply points back to the Rhine River. Although fighter-bombers would help, their main assignment would be close support to meet the immediate threat, the front line Panzer force; they would also fly armed reconnaissance against road and rail targets from the Ardennes to the Rhine River. The planners viewed air superiority as essential and likely to need more attention because of the increased *Luftwaffe* presence, although they did not at first address this issue specifically. Eventually, they relied on Eighth Air Force bombers and fighters to handle much of the *Luftwaffe* counterair threat (**Map 17**).[24]

With the cancellation of Operation Tink, December 20, 1944, proved to be the key planning day for a counterattack by the Third Army–XIX TAC team. At a morning conference at the Third Army command post, Patton distributed the new order of battle: XX Corps would remain deployed along the Saar; XII Corps would reinforce the blocking force at Echternach; VIII Corps would strike the salient from the west; and while III Corps attacked from the south with 4th Armored Division advancing north to Bastogne, the 26th Infantry Division would move toward Wiltz, and the 80th Infantry Division toward Diekirch. Third Army units, Patton explained, had already begun to regroup to wheel the army's axis of advance from northeast to the north.[25]

Armed with Patton's plan, Weyland met with key staff members and decided to revive X-Ray, the command's small mobile command post that permitted close air-ground coordination, and move it with the Third Army command post from Chalon to Luxembourg City the next day. This time, chief of staff Col. Roger Browne would head X-Ray, while Colonel Thompson remained in command of the rear headquarters at Chalon. General Weyland would operate advance headquarters from Nancy with his combat operations officer, Colonel Ferguson. Much, of course, would depend on the pace of the battle and General Patton's location.[26]

At the same time, Weyland directed his signal officer, Col. Glenn Coleman, to work with Ninth Air Force to extend land lines from the Metz airfield, already scheduled to become operational later in December, to the Luxembourg City headquarters and other XIX TAC bases. They also discussed additional communications problems, especially new radar locations, and they decided to leave the MEW radar at its present location at Morhange, east of Nancy, until Third Army shifted the bulk of III Corps forces north. Then the MEW radar, which offered the best range and precision of available radar systems, could serve as the primary navigation and warning radar for the command's operations in the Bulge.[27]

That evening SHAEF informed Weyland of the new air and ground command arrangements based on Eisenhower's decision to divide the Ardennes sector into northern and southern halves for better command and control. Field Marshal Montgomery would command Allied forces in the northern sector, while in the south, General Bradley retained control of Patton's Third Army

along with a sprinkling of First Army units. In the north, the two American air commands, IX and XXIX TACs, would be subordinated to the British Second Tactical Air Force commanded by Sir Arthur Coningham (**Map 17**). Coningham, however, left General Quesada free to apply both British and American fighter-bombers as he saw fit. This arrangement for the air forces avoided the kind of friction that developed later between Montgomery and American ground commanders over the British Field Marshal's methodical and extended preparations, and over his subsequent claims to have "saved the American side" in the Ardennes emergency.[28]

In the press of events, when Weyland contacted the Ninth Air Force chief of staff on December 20, 1944, regarding reinforcements, he learned that his request the previous evening had not reached Vandenberg. Weyland stressed its importance in light of the SHAEF message, and a short time thereafter he spoke to Vandenberg personally. The Ninth's commander did not commit himself at this point, but suggested they meet in Luxembourg City in two days, on December 22.[29]

Once again General Weyland turned to General Patton for assistance. The next day he drove to Luxembourg City and, after assuring himself that his staff had XIX TAC's "Spitfire X-Ray" ready for operations, conferred with Patton on the aerial reinforcement issue. Patton readily agreed to prime Bradley, and he delivered on his word. Next morning, on December 22 at 12th Army Group headquarters in Luxembourg City, Bradley, Patton, Vandenberg, and Weyland reached agreement on Weyland's request for additional units. Since Third Army would make the main effort against the Germans in the Bulge, Weyland argued, tactical resources needed to be divided more equitably among the air commands.[30]

The outcome pleased General Weyland. Within the week he expected to receive three fighter-bomber groups from IX TAC: the 367th (a P–38 group) and the 365th and the 368th (two Thunderbolt groups). The 365th would go to the Metz airfield when the engineers had it ready, and the other two groups would go to Juvincourt, at least temporarily. Two tactical reconnaissance squadrons from XIX TAC would join the 10th Photo Reconnaissance Group at Conflans. This would bolster the reconnaissance capability of the command by 50 percent, and the air leaders expected the emergency to call for a maximum effort from these units. At this early date, the planners at 12th Army Group Headquarters discussed the likelihood of each tactical air command temporarily receiving a P–51 group from Eighth Air Force to handle escort duties and perform counterair missions. The XIX TAC group was later identified as the 361st Fighter Group, a P–51 unit, and the command based it at St. Dizier. With these additional units, XIX TAC would have a striking force of eight groups totaling 360 airplanes—its most potent arsenal since the summer campaign in France. Moreover, the locations of the new bases improved the effectiveness of the force because all were within short striking distance of the Ardennes and the Saarland.[31]

Yet, the transfer of these aerial units had not been cleared beforehand with IX TAC's commander, General Quesada, the primary loser in the realignment. When Weyland saw Vandenberg the next morning, he learned that both IX TAC and Second TAF (RAF) vigorously protested the transfer. In view of the deteriorating situation on the ground in the northern sector at that time, Quesada's dismay was understandable. Nevertheless, Vandenberg explained, the transfers would take place as planned. Despite the disagreement, Quesada's objections did not alter the close personal relationship between the two American air commanders or affect tactical air power's effective response. The rapid transfer of units between commands demonstrated its flexibility.[32]

The basic command, control, and organizational arrangements were completed on December 22, 1944, the sixth day of the German offensive. General Weyland immediately began coordinating support for the new air units with his maintenance and supply officers, and he approved a new tactical reconnaissance plan that comprised ten areas generally encompassing St. Hubert within the western portion of the Bulge, Cologne, Mainz, and St. Avold in Lorraine.[33]

The command's preparations for a counterattack during the initial week of the offensive proceeded smoothly. Weather remained the major uncertainty. Group histories for this period reflect the intense preparations to attack and the frustration and anxiety of waiting for the weather to clear. Moreover, for the first time on the continent, the command also had to worry seriously about *Luftwaffe* air raids. By December 22, Third Army reported 78 *Luftwaffe* raids. Most seemed to be nuisance strikes, such as the attacks on Rosiers and Metz, two of the XIX TAC airfields. Although these raids caused little damage, they nevertheless heightened the tension and compelled planners to take action to thwart the air threat in their rear area.[34]

Meanwhile, despite the bad weather, German ground forces experienced problems executing all phases of their plan. In the north, U.S. V Corps troops

P–38 of the 367th Fighter Group

exercised unexpectedly stiff resistance along the Elsenborn Ridge, and Dietrich's armored forces found themselves delayed and confined to only two of the four needed roads. Likewise in the south, VIII Corps grimly held on for three days opposite Echternach, thereby delaying the Seventh German Army's drive to break through to the southwest. In fact, both northern and southern shoulders continued to resist and confine the width of the German attack. As a result, the Fifth German Army in the center assumed the main burden of the offensive, as it had more success breaking American defense along the Schnee Eifel ridgeline with its two Panzer corps in the lead. Even here, tenacious pockets of resistance delayed General von Manteuffel's forces. St. Vith held out until December 23, forcing the Germans to deal with severe traffic congestion and supply backups. For an offensive scheduled to reach the Meuse River while operating on two and a half days' worth of supplies and five days' rations, these delays proved critical.[35]

By December 22 at XIX TAC, officers and enlisted men realized that German forces had encircled Bastogne and were regrouping for a fresh assault. Although 4th Armored Division's three combat commands moved northward, their pace slowed in the face of heavy snow and ice, and the German forces in their path. The fighter groups eagerly sought to get into the battle—none more so than the 406th Fighter Group that had developed such good rapport with the 101st Airborne Division when these paratroopers arrived at Mourmelon in late September 1944 to recuperate after their rough experience in Operation Market Garden. The 406th Fighter Group expected to take the lead at Bastogne just as soon as the weather broke.[36]

Paratroopers of the 101st Airborne Division, supported by firepower of the 4th Armored Division, Bastogne

Victory Weather

Seven days after the Nazi breakthrough, on December 23, 1944, the Allies awoke to a Russian High, a high pressure system from the east, which brought clear skies and cooler temperatures throughout the region.[37] Now the planes could fly and tanks could roll during what the American side would call five days of victory weather. For Weyland's forces, the next five days, from December 23–27, proved the most active in the command's operational experience and provided a superb example of tactical air power's effect on a land battle under emergency conditions.[38]

On December 23, the XIX TAC swung into action, lacking only the 361st Fighter Group, which Eighth Air Force had yet to deploy to the continent. The airplanes flew in close support of VIII Corps forces at Bastogne and of Third Army's advancing armored columns, by now within six miles of the beleaguered town, although facing increasingly stiff German resistance. The 362d Fighter Group flew six missions in support of the III Corps forces, but it also supported XII Corps with two missions and, for good measure, sent 15 aircraft to escort C–47 Dakotas on a mission to drop supplies in parapacks to the American troops isolated at Bastogne. Characteristic of flying during the Bastogne period was the 362d Fighter Group's high mission rate. The XIX TAC's average of 57 missions per day for the five-day period was among the highest in the command's history.

During the emergency operation, ground support personnel serviced, reloaded, and returned the aircraft to action as fast as they possibly could. Tactical reconnaissance pilots played a particularly crucial role, keeping all roads and railroads entering the Bulge under continuous surveillance. It became increasingly routine for these pilots, having called in targets to the control center, to lead fighter-bombers to them. This saved time, allowing more fighter-bomber missions to be flown during these short December days. Sortie figures for the tactical reconnaissance squadrons reflect their important contribution. They flew 26 successful sorties on the 23rd, but with the addition of the two squadrons from XXIX TAC, they averaged 70 for the remaining four days. No unit proved more important than the night photo squadron, which flew 99 sorties in December, its largest number to date, acquiring urgently needed nighttime photos of highway traffic and communications targets.[39]

The missions of the other groups on December 23 included escort for 263 C–47s to Bastogne, specific close support, armed reconnaissance of the Bulge and the Eifel region near Trier, and coverage of the weakened Saar front opposite XX Corps. Moreover, because Third Army leaders worried about XII Corps' right flank, the 10th Photo Reconnaissance Group flew a daily mission in the Trier-Merzig area looking for any signs of a buildup and excessive

bridge-building. In effect, the command again protected Patton's right flank much as it did in France the previous summer.[40]

These five mission types characterized the entire Ardennes period. Of the five, close air support in the Bulge received the most attention as Allied air forces attempted to slow the German drive and protect American units under attack. During the five days of victory weather, close support sorties outnumbered armed reconnaissance sorties by two to one (1,124 to 509). Again, however, the wartime records defy precise analysis. Many aircraft that initially set out on a ground support mission ended flying armed reconnaissance after being released by the ground controller. Likewise, pilots flying armed reconnaissance often had targets in the St. Vith, Malmedy, and Bastogne areas in close proximity to friendly ground forces. Then, too, fighter-bombers on escort duty for bombers and C–47 transports frequently bombed and strafed targets of opportunity after completing their escort missions.[41]

Targets of opportunity abounded. Following the Bulge Campaign, in February 1945, the command's operational research section analyzed the effort devoted to targets of opportunity from December 15, 1944, through January 31, 1945. They included in this category targets attacked on armed reconnaissance missions and on missions that originally had assigned targets but that ended attacking targets of opportunity. During the five-day Bastogne emergency, the command's daily sortie rate for targets of opportunity averaged 71 percent of the total 2,846 sorties flown. In view of the emergency, controllers often diverted aircraft to "hot targets." Researchers reminded the command of the difficulty of compiling precise and accurate information, and cautioned that "the number and type of such targets cannot be determined…[precisely]…, since operations following December 15 have involved the attacking of such a wide variety of targets, most of which might well be classed as targets of opportunity."[42]

Both the scramble and escort missions also demonstrated that the airmen still considered the *Luftwaffe* a major threat. During the Ardennes Offensive it became standard procedure to escort and fly cover for all medium bomber flights. At times, the fighters and bombers failed to properly rendezvous, however, and the bomber-force leader then had to decide if the importance of the target required that his unit proceed unprotected. That option ceased on December 23, 1944, when a large force of about 500 B–26 Marauders and A–20s, after failing to contact their fighter escort, chose to fly on and strike vital bridges west of the Rhine. On this mission that force lost 37 aircraft, 31 to enemy fighters and 6 more to flak.[43] The arrival of P–51s from the Eighth Air Force on December 24 relieved the XIX TAC of a considerable escort responsibility, and from that date until the end of the Ardennes Campaign, the P–51-equipped 361st Fighter Group flew the majority of medium bomber escort missions, allowing the rugged P–47s to concentrate on what they did best—bomb and strafe.[44]

The command's concerns about the *Luftwaffe* threat during the fight for Bastogne were well-founded, as the B–26 losses on December 23 made plain. The urgent need of forward *Wehrmacht* troops for aerial protection from the massive Allied fighter-bomber assault during the five days of late December brought the *Luftwaffe* out in force. It averaged nearly 600 sorties per day and a further 200–250 at night from an assortment of night fighters, fighter-bombers, and bombers. The desperate situation now faced by German troops in the Bulge required the *Luftwaffe's* entire effort, which meant that Allied bombers could attack rearward supply and communications sites virtually unmolested. Indeed, the vigorous appearance of the *Luftwaffe* on December 23 and resultant loss of B–26 medium bombers prompted Ninth Air Force to take swift counterair action. It possessed one division of heavy bombers on loan from Eighth Air Force for use in its interdiction program east of the Rhine River. On December 24, Ninth Air Force dispatched them to carpet-bomb 14 airfields in the Frankfurt and Cologne areas.[45]

By month's end the Allied heavy bombers and fighters had exacted a severe toll from *Luftwaffe* forces. From the approximately 1,000 enemy sorties flown over the battle lines west of the Rhine on December 23, Allied airmen forced that daily rate steadily downward until December 27, the last good-weather day of the period, when the *Luftwaffe* managed only about 500 sorties—some 50 percent of the number flown four days earlier. Moreover, it became increasingly difficult for *Luftwaffe* aircraft to penetrate Allied defenses and reach the Ardennes area from bases in the Rhine valley. The American air counteroffensive had pushed German air support, like other supporting elements for German ground forces in the Ardennes, steadily eastward away from the front lines. The *Luftwaffe* withdrawal put greater strain on its already depleted fuel supply. Although the *Luftwaffe* might inflict severe losses on the Allies, it could neither protect the *Wehrmacht* ground troops, especially during daylight hours, nor blunt the Allied air and ground counterattack. Moreover, the massive Allied air response during the days of good weather resulted, for the first time, in widespread reports of *Luftwaffe* pilots using any excuse available to return early from their missions.[46]

Claims of aircraft destroyed by XIX TAC for this five-day period were the highest in its history. On December 23, command pilots counted an impressive 34 enemy aircraft shot down in air encounters. Although claims of so great a number of enemy aircraft vanquished in a single day would not again be made, by the twenty-seventh, when the weather began closing in once again, the command could claim a total of 84 enemy aircraft killed and 35 damaged. During the same five-day period XIX TAC also suffered its highest loss rate. Of 93 aircraft lost in combat during December, 47 occurred during the period from December 23–27. The worst losses occurred on December 26, the day after Christmas, when the XIX TAC lost 14 aircraft, although six pilots parachuted safely into friendly territory. By the end of December, General

Weyland once again had to discuss the rate of the flow of P–47 replacement aircraft with General Vandenberg.[47]

Participants described the concentration of flak in the Ardennes as the greatest in the war to date. Allied intelligence explained that two large, self-propelled flak units had been sent forward under fuel and movement priority to secure key towns and crossroads. By the time they reached the point of farthest advance, five miles from the Meuse River, all communications junctions had heavy flak protection. Understandably, the command suffered most of its losses from flak. Of the 93 aircraft lost in December, flak accounted for 42 and probably 22 more as well. In January 1945 the statisticians attributed 35 of the 50 aircraft shot down to flak.[48]

Capt. Richard Parker, 405th Fighter Group (left); flak-spattered P–61 (below)

Most of the tactical air command's losses during the Bastogne operation occurred among the P–47 groups, the 362nd, 405th, and 406th Fighter Groups, which flew the majority of close air support missions and had the highest sortie rates. These three groups accounted for 42 of the 69 pilots lost in December, and 47 of the 81 aircraft lost in combat. What at first is most surprising are the aircraft abort statistics. Although the figure for the month was 6 percent, that for the period, December 21–31, was only 4.23 percent. Moreover, the record shows mechanical reasons responsible for only 1.59 percent of the aborted flights. Yet this record occurred during the most intense flying period of the month, which suggests that the emergency elicited a special effort from the maintenance and support people, and that the command permitted aircraft to fly with problems not otherwise tolerated.[49]

Along with 11 aircraft lost on December 23, one other disturbing incident occurred on that day. Intelligence officers reported that pilots of 362d Fighter Group P–51s, in a dogfight near Trier against what they later claimed were enemy FW 190s, tangled with and shot down one of the Orange Tail P–47s from the 358th Fighter Group. By the end of the month, the problem of what authorities referred to as friendly fire incidents involving both aircraft and artillery units would become a major issue of concern for Ninth Air Force and 12th Army Group.[50]

Support Facilities and the Aerial Relief of Bastogne

While XIX TAC pilots pressed their attacks during the days of victory weather, General Weyland spent much of the period dealing with a variety of operational support issues. On December 23, the topic of airfield status headed the list, with discussion focused on the Metz airfield. Weyland's chief engineer, Colonel Smyser, promised to have the Metz field ready for one fighter-bomber group on December 25, and for another one on January 1. As usual, the engineers' hopes proved too optimistic. By this time, they constructed all fields with pierced steel-plank to avoid the damage from weather that forced the command to abandon six airfields in the fall. Even with pierced steel-plank runways, however, the engineers needed to lay a rock base first. They also had learned from experience that they could not declare a field operational when only the runway and little else had been completed. An operational airfield needed useable, all-weather hardstands, service roads, and taxiways *before* the aircraft arrived.[51]

The Metz airfield, which lay within 25 miles of the Saar valley, was closer to enemy lines than any other XIX TAC base. For this reason General Weyland wanted to ensure that it had adequate air defense units in place. He

called Ninth Air Force's air defense chief about protection for the three new fighter-bomber groups that were on their way to XIX TAC. Weyland learned that Metz already had an antiaircraft battery in place, and the air defense chief promised to check on Juvincourt and put a battery at Mourmelon. By December 25, Weyland had arranged for two antiaircraft batteries at each airfield. Third Army continued to report nightly visits from the *Luftwaffe*, and Weyland could not afford to take the aerial threat lightly.

On December 24, with the air defense situation apparently well in hand, General Weyland and his staff turned their attention to airfield facilities. That day he visited Juvincourt, where he found that the 367th Fighter Group had just arrived, "glad to join XIX TAC." Although the group's sincerity is not to be doubted, the unit could hardly be pleased with the new field. The 368th Fighter Group had been scheduled to move from Juvincourt to the Metz complex, but it flew from Mourmelon until the Metz field could be readied. Hardstand problems at Mourmelon required that the group remain at Juvincourt along with the 367th. The heavy flying of the next few days considerably strained the support facilities of a base not designed to service two groups simultaneously.[52]

After conferring on December 24 with his 100th Wing commander, Brig. Gen. "Tex" Sanders, Weyland decided to establish what he referred to as a rear wing at the command's rear headquarters at Chalons. This, he explained, would improve operational control of the groups in the Marne area, while the 100th Wing, which had moved to Metz, would handle support for the forward bases in Lorraine. The command declared the rear wing operational on December 27, 1944, which in effect, meant that Weyland had further decentralized command and control. Despite the shorter flying distances, the new arrangement proved similar to the one used for mobile warfare in France. Extremely decentralized tactical air operations had been associated with widely separated facilities or fast-paced mobile warfare in France. Now, however, although the front was relatively stable, Weyland established three headquarters echelons and two wings. He could rely on experience, good communications links, and his tactical control group located with the advance headquarters to ensure efficient command and control.[53]

The next four days proved relatively quiet along the Saar and Mosel fronts as the battle for Bastogne, farther to the north, intensified. Responsibility for the city's aerial defense belonged to Weyland's command, and relieving Bastogne would always retain a special place on the command's honor roll. The Bastogne mission illustrates the various ways the tactical air force could contribute to support troops in a defensive situation. None proved more important than the escort mission to protect Allied transports supplying the garrison. In this instance, no one questioned the number of sorties that might have been used for other missions. Bastogne, which held up the XLVII Panzer Corps, had to be defended at all costs. Led by the 406th Fighter Group, three groups flew a total of 95 sorties on December 23 when escorting 263 C–47 cargo craft to

the city. The size of the escort force varied from one to two squadrons, depending on the number of transports that required protection. Frequently, the fighter-bombers flew armed reconnaissance or close support missions after completing the escort assignment. This, for example, occurred on December 23, when a squadron from the 362d Fighter Group performed its escort responsibilities and then went on to strike a German command post and bivouac area.[54]

A single squadron provided escort protection on December 24 to a transport force flying to Bastogne because the transports numbered only 161. Yet the squadron from the 354th Fighter Group failed to rendezvous with the transports and went on to attack its secondary target, a marshaling yard near Mayen, 16 miles west of Coblenz. The next day, a four-plane flight from the 405th Fighter Group flew the only escort mission, one that proved significant. In the initial fighting east of the city, most of the 326th Airborne Medical Company had been captured. With medical needs critical, a Third Army physician volunteered to go into the besieged perimeter in a L–1 light plane. He did so without incident under the protection of the 405th Fighter Group. The number of escort missions increased to five on December 26, the day the Third Army broke the siege, and to three on December 27, before the weather turned nasty again. If the results of the operation are measured in losses, as well as how well they ensured the survival of the garrison, the relief operation succeeded. Of the 901 C–47s involved over the five-day period, 19 from the IX Troop Carrier Command were lost.[55]

Along with the escort mission, much of the command's close support effort during this period focused on Bastogne, either in support of VIII Corps troops surrounded inside the town, or in support of III Corps forces driving north to rescue the trapped VIII Corps units. Attacks on close-in targets that defenders could not shell because of ammunition shortages proved particularly effective. While all groups participated at one time or another during the five days, General Weyland assigned specific groups almost exclusively to these two corps. The 362d Fighter Group covered the advance of the III Corps' 4th Armored Division, while the 406th Fighter Group flew the close support mis-

C–47 used for supply drops to besieged troops at Bastogne

sion for VIII Corps in the Bastogne area. During the height of the battle, from December 24–26, the 406th Fighter Group averaged 17 missions a day in support of VIII Corps. Losses were heavy, with seven 405th Fighter Group aircraft shot down on December 26 alone. Although the 362d Fighter Group suffered fewer losses, none was more difficult to accept than the death of Maj. Berry Chandler, commander of the 379th Fighter Squadron, inadvertenly shot down on December 26 by III Corps antiaircraft fire. That same day Weyland received a personal call from Maj. Gen. John Milliken, III Corps commander, thanking the 362d Fighter Group for its magnificent support in breaking through to the city's defenders. Weyland promptly passed the corps commander's message on to the group hoping it would help atone for the loss of Major Chandler.[56]

The *Luftwaffe* appeared again in force on December 26, mostly in the IX TAC sector. Even though General Weyland's Y service, the command's intelligence communications intercept operation, had predicted an air attack on Bastogne consisting of between 400 and 500 aircraft, nothing of the sort occurred. Later command reports affirmed that the Y service made a valuable contribution during the Ardennes Campaign, but the record shows little more than two Y reports, both of which proved to be false alarms.[57]

The Bastogne emergency also elicited a major effort from the 10th Photo Reconnaissance Group. Responsibility for battlefield coverage of the area fell primarily to F–6 (P–51) pilots of the 15th Tactical Reconnaissance Squadron, who proved adept at spotting enemy armor columns preparing to attack the perimeter, leading fighter-bombers to attack targets, and at adjusting artillery fire for the gunners. Normally the F–6s, rather than the unarmed F–5s (P–38s) of the 31st Photo Reconnaissance Squadron, flew photo missions in high-flak areas. Bastogne was not, however, a routine situation for the group. The 101st Airborne Division trapped in Bastogne requested photos of the area in order to conduct accurate counterbattery artillery fire. A P–38 pilot volunteered to fly in the photos, which the group gathered from its photo library and delivered in a drop-tank. The pilot had to come in low and slow to drop the tank accurately to the encircled troops. Although he succeeded, the 101st wanted more current prints. The next day the 31st Photo Squadron flew 20 missions to get them. Again, volunteers came forward to fly the dangerous delivery mission, but two separate drop attempts ended in failure when German flak downed both planes. The experience of the P–38 pilots well represents the extra effort airmen displayed during the Bastogne emergency.[58]

Only in the area of night fighter support of Bastogne did air power prove deficient. Generally, IX TAC's single night fighter squadron patrolled the Bulge area, while XIX TAC's 425th Night Fighter Squadron flew patrol and intruder missions in the Eifel and Saar regions. Reviewing the operation, the 12th Army Group Air Effects Committee concluded that "generally, night fighter activity within the area was inadequate."[59] Yet this was a major theaterwide weakness of the tactical air forces.

On December 26, Third Army broke the German encirclement at Bastogne. At 1:00 p.m., General Patton called Weyland to request a maximum effort in front of the 4th Armored Division for its final push to Bastogne. Weyland immediately directed his combat operations officer, Colonel Ferguson, to lay on extra missions. That afternoon, the 362d Fighter Group flew nine missions in support of III Corps, while VIII Corps forces received eight from the 405th Fighter Group and 18 from the 406th Fighter Group. The extra effort paid off. Elements of the 4th Armored Division made contact with the 101st Airborne Division at an outpost two miles south of the city later that day. By December 27, the last day of victory weather, the task became one of keeping the Bastogne corridor open. That did not promise to be easy.[60]

F–6s, 10th Photo Reconnaissance Group (above); tank commander of an M–7 tank directing fire from a self-propelled 105-mm outside of Bastogne (below)

Protecting the Corridor, Dealing with Friendly Fire

By the end of December 1944, the German drive in the Ardennes had stalled and the most forward units were forced back (**Map 18**). Panzer forces had reached Celles, within five miles of the Meuse, as early as December 24, before stiffening resistance from British and American troops and a lack of fuel halted their advance. At year's end, Third Army was involved in heavy fighting in the III Corps area where Patton's corridor into Bastogne had been widened to approximately five miles and the Bastogne-Arlon highway cleared. In the VIII Corps sector, units advanced to within three miles of linking up with First Army's forward elements, and they fought hard to repel counterattacks west of Bastogne. The XII Corps units, meanwhile, conducted a seesaw battle for Echternach at the southern hinge of the Bulge, where their pace slowed in the face of bad weather, rough terrain, and German artillery concentrations. While Field Marshal Montgomery continued to gather forces in the north in preparation for his major offensive planned for January 3, 1945, General Patton acted to protect the Bastogne corridor and readied his forces to move farther northeast to St. Vith by way of Houffalize to cut off German units to the west. Bad weather and German intransigence combined to slow progress everywhere.[61]

Bad weather in late December certainly weakened XIX TAC's efforts to cover ground units in the Bulge and to undertake an ambitious interdiction program to cut the enemy's lifeline. Along with directing the air campaign to support the Third Army, General Weyland also confronted issues of air defense that stymied his best efforts. From December 26, 1944, until January 3, 1945, when bad weather forced a two-day cancellation of flying, Weyland's forces continued to support the Third Army corps as much as possible and in the same manner as it had done so previously. The 362d and 406th Fighter Groups largely flew in support of III Corps and VIII Corps operations, respectively, while the 405th Fighter Group covered the XII and XX Corps fronts. This left the three new groups and the 354th Fighter Group available to focus almost exclusively on the interdiction program developed by Ninth Air Force. Although in later years General Weyland provided no special reason for this division of labor, one must assume that he considered the command's longest serving P–47 groups best qualified to fly close air support missions because they were more accustomed to working with Third Army's units and their air controllers. Nevertheless, all four groups flew "cooperation" missions with the ground forces on occasion, especially in late January 1945, when the Germans on the hitherto static Lorraine front increased their pressure on Saarlautern in XX Corps' area and began a mass exodus from the Bulge.[62]

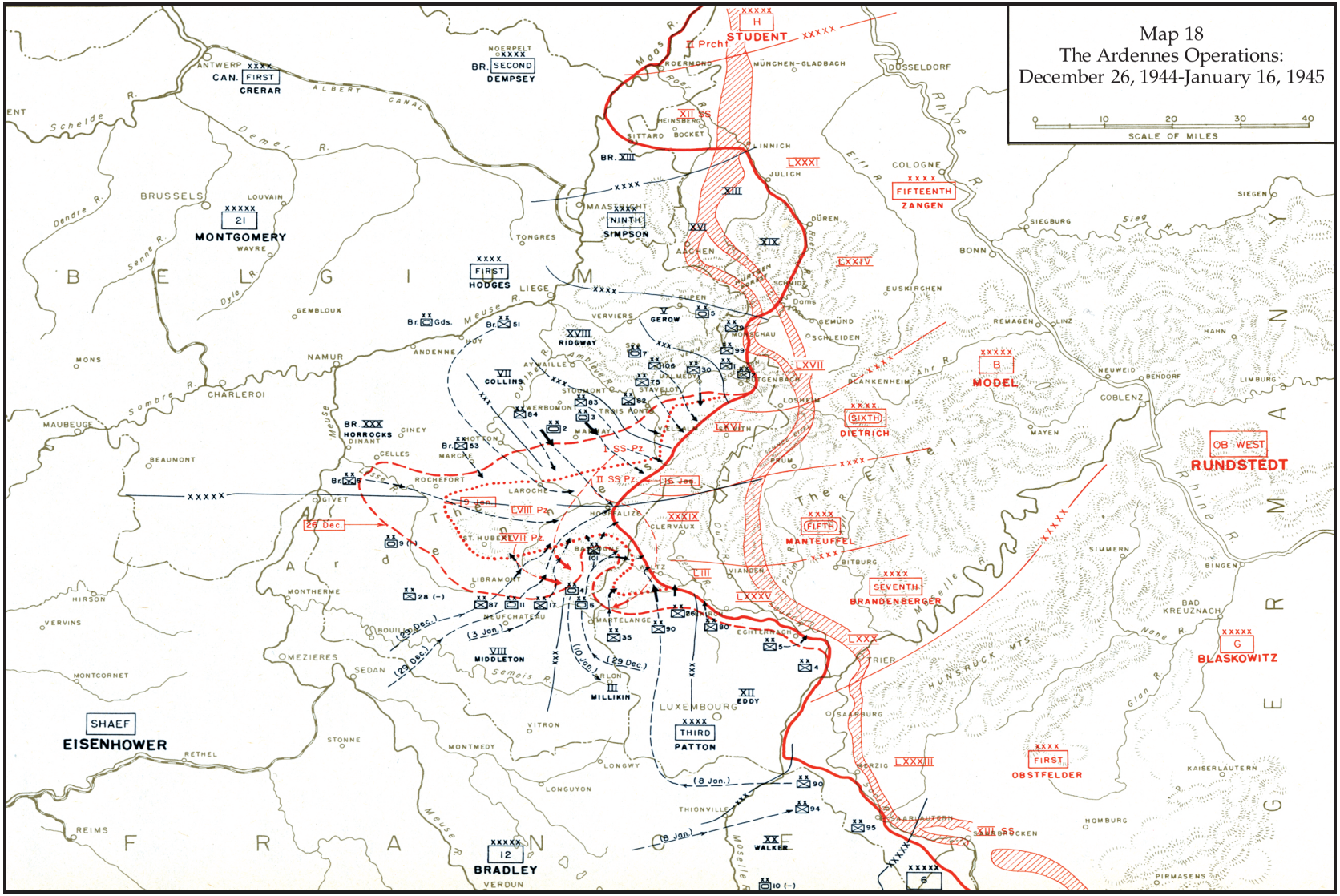
The theaterwide interdiction plan developed by Ninth Air Force and 12th Army Group sought to break down the German forward supply system by reducing the enemy's road capacity in the Bulge itself, while simultaneously

destroying the road and rail system in the Eifel and communications centers east of the Rhine. The planners divided bomber targets geographically into an inner and outer zone to be attacked by medium and heavy bombers, respectively. By the end of December the interdiction effort began to produce results. Towns in the Ardennes had become favorite targets as chokepoints and reports of rubble blocking traffic became commonplace. In the Eifel, where the XIX TAC and the IX Bombardment Division had been concentrating on rail bridges and marshaling yards, intelligence analysts considered the rail network useless. Ultra intercepts confirmed their assessment, which described the chaos on both sides of the Rhine River. Shipments of German materiel faced delays of a week or more now that supplies had to be off-loaded at the Rhine for movement westward. With the rail system in the Eifel largely destroyed, the fighter-bombers turned their attention to the road network, while the medium bombers used larger bombing formations to attack key bridges. This aerial interdiction effort gradually isolated the battlefield.[63]

Mission assignments reflected renewed emphasis on interdiction for the seven-day period beginning December 27 when the new groups began flying in force for Weyland's command. Except for one 368th Fighter Group seven-plane attack on a tunnel on January 2, 1945, the three new fighter-bomber groups exclusively flew armed reconnaissance. Nearly half of the 361st Fighter Group's missions were fighter sweeps that produced attacks on targets of opportunity. For the six flyable days during this period, interdiction sorties averaged 78 percent of the total for the command. As always, operations of the tactical air arm reflected the ground situation, and after Bastogne, the XIX TAC could afford to cover the ground forces with fewer missions and devote a larger share to interdiction targets. Its flexibility enabled it to adjust with ease to the new requirements.[64]

Although the *Luftwaffe* seldom appeared during the final days of December 1944, Third Army continued to report nightly German air raids. During the five days of victory weather, the raids rose to more than 100 per night, but they declined to approximately 50 by month's end. Although airfields occasionally reported attacks, damage never proved severe, and Third Army air defense units always reported destroying at least a portion of the attacking force. Nevertheless, the German strikes made air leaders like Weyland sensitive to a threat he could do little to contain. Certainly his night fighter force was woefully inadequate for the task.[65]

General Weyland's single P–61 night fighter squadron, like IX TAC's, could only be described as understrength, short of spare parts, and battle weary. Altogether, the squadron flew only 111 sorties during the last week of the month which accounted for 14 enemy aircraft destroyed at a cost of 3 of their own. The 425th Night Fighter Squadron seldom could sustain a consistently high sortie rate. One night the number might be 20 and another night 5; the bad weather and hazards of night flying combined with equipment short-



SOURCE: Vincent J. Esposito, ed., *West Point Atlas of American Wars*, V. 2, Map 62, (New York: Praeger, 1960)

ages to limit the Black Widow's effectiveness. Even with the XIX TAC controlling all night flying with its best radar, the MEW system, periodically either the controller or pilot would fail to make positive contact with one another, or the aircraft's radar would malfunction. Apart from this, the airmen found the counterair intruder mission especially challenging because enemy airbases often proved too widely dispersed or beyond the range of available AAF aircraft. Nighttime disorientation and uncertainty could kill, too. The most unfortunate example of this occurred on December 27, 1944, when General Weyland learned that a Third Army air defense battery shot down a P–61—the second such incident. Although the gunners bore part of the blame, in this case the pilot mistook another base for his home one and inadvertently wandered into the army's inner artillery zone.[66]

Despite the handicaps, however, neither tactical air command wanted to give up its night fighters. With their enormous fire power of four 20-mm cannon, napalm bombs, and eight 5-inch rockets, when properly applied, the P–61s had a terrifying effect on enemy morale. For air leaders, the answer lay in more aircraft and spare parts. On the last day of the month, Col. Robert M. Lee, operations deputy at Ninth Air Force, called to ask whether the XIX TAC would be interested in a British Mosquito squadron from the Mediterranean theater to supplement its night force. Weyland gladly accepted the offer, but when he heard that a P–61 squadron would become available as well, he suggested that IX TAC receive the Mosquito squadron because of its proximity to RAF bases. Ninth Air Force disagreed, and the Mosquitoes of the 421st Night Fighter Squadron arrived at Etain to join the 425th Night Fighter Squadron on January 13, 1945. The XIX TAC night fighters remained, however, a small but gallant force arguably faced with the most demanding mission in the command. Their small numbers limited them to a harassment role having little impact on German operations.[67]

This issue of friendly fire—of American gunners on the ground mistakenly shooting at American aircraft overhead, or American aircraft mistakenly attacking other Allied aircraft or bombing or strafing American forces on the ground—became so serious it could not be ignored. Losses to friendly fire persistently occurred during the Allied campaign in the Mediterranean, and the problem never had been solved. If carpet bombing errors by heavy bombers employed in tactical operations such as Cobra produced the most spectacular and notorious mistakes, the problem proved even more acute in the far more numerous fighter-bomber close support operations. During fighter-bomber bombing and strafing in proximity to friendly ground forces, opportunities for error were ever-present. Large- or quick-reaction military operations like the Ardennes Offensive demanded greater close air support, attracted more attention to real or imagined *Luftwaffe* intruders, and magnified the problem across the front. Pilots frequently complained about trigger-happy infantry gunners, while the latter reported that too often Allied fighters attacked them instead of the enemy.

Although General Weyland's responsibilities included air defense of the Third Army area, he did not control all air defense units. In the tactical control center, the air force controller worked closely with the liaison officer of the 38th Antiaircraft Artillery (AAA) Brigade (which protected the airfields) to coordinate night fighter patrols, inner artillery zones, and the so-called blank check areas, for which the controller specified certain times for firing. Army-controlled air defense units, however, remained coordinated with, but not fully integrated into, the air force warning system. General Weyland sought to answer the problem by stressing positive identification and radar control of fighter-bombers, and enforcement of procedures governing local air defense. This meant ensuring that all elements in the system received comprehensive aircraft movement information. All too often, for example, Eighth Air Force aircraft, flying through friendly artillery zones, were surprised when fired upon, and were then chagrined to learn that the artillery controller had no knowledge of their flight plan.[68]

The air defense problem demanded constant attention. Every major joint operation required detailed coordination on air defense procedures, while each time one of his air units moved to a new location, Weyland needed to confirm that the site had adequate protection from the Third Army's 51st AAA Brigade. His challenge increased in winter and during the intense Ardennes fighting. Heavy snows made target identification more difficult, especially in the breakthrough area where airmen worried about an imprecise bomb line, about friendly troops positioned on three sides of the enemy bulge, and about the fake target-marker panels deployed on the ground by the Germans.[69]

The XIX TAC thoroughly investigated every friendly fire incident reported. Its records for the winter months on the subject are reasonably comprehensive and show an inadvertent firing-at-aircraft incident nearly every day in the month of December 1944. Perhaps Third Army gunners can be forgiven when, for the first time in the conflict, they experienced substantial and recurrent *Luftwaffe* raids. On the ground, most friendly fire reports originated with Third Army units and concerned strafing attacks by friendly aircraft. Normally the battalion headquarters sent these field reports to the commander of the 38th AAA Brigade, who passed them on to Colonel Ferguson at XIX TAC. He usually turned them over to the command's capable inspection team of Lt. Col. Leo H. Johnson, Air Inspector, and his chief investigating officer, Chief Warrant Officer (CWO) Samuel L. Schwartzberg. On occasion, Ninth Air Force also contacted General Weyland with a request to investigate an incident that might have involved the command's fighter-bombers. The inspectors' investigation reports reveal an impressive comprehensiveness and objectivity. Not unlike contemporary air accident investigation procedures, the inspectors collected reports from all parties, examined various types of evidence including film when available, reconstructed the missions of all groups that flew on the day of the incident, and interviewed all parties concerned. If XIX TAC pilots proved to be at fault infrequently, the friendly fire investigative reports

Col. James Ferguson (far left) and General Weyland (far right) at a press briefing

nevertheless appear thorough and convincing. Throughout the Allied drive into Germany, friendly fire continued to bedevil the air-ground team's best efforts to eliminate it.[70]

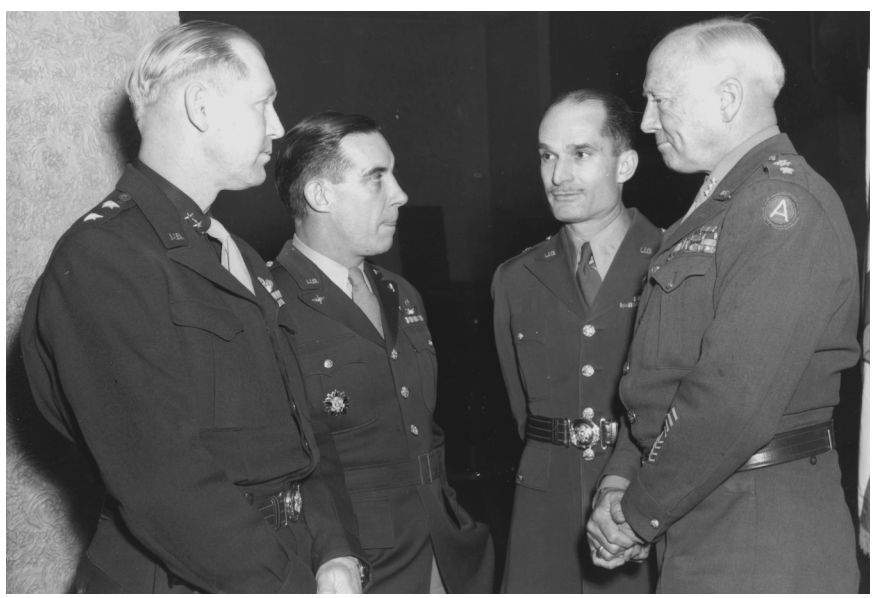
The problem of friendly fire had been building for some time, as Weyland's concern over the losses of Major Chandler, the night fighter, and the 362d Fighter Group incidents attest. The issue came to a head for both the air and ground leaders during the last two days of December 1944, when Luxembourg's capital served as the advance headquarters site for Generals Bradley, Patton, and Vandenberg. Apparently on December 30 Ninth Air Force controllers called for help when two German Bf 109s appeared overhead. Two P–51 and two P–47 aircraft arrived five minutes after the German aircraft left. In spite of attempts to identify themselves, anxious American gunners guarding a bridge on the city's outskirts shot down a 405th Fighter Group P–47 and the pilot perished. The incident deeply disturbed General Weyland, who sent a sharp message from his Nancy headquarters to Colonel Browne at X-Ray. He "requested" all Allied antiaircraft batteries be prohibited from firing on any aircraft except those positively identified as belonging to the enemy and clearly observed to be strafing or bombing.[71]

The following day, on December 31, the P–47 affair at Luxembourg City took center stage in an exchange of messages among key air and ground leaders. Its seriousness became evident when Weyland reported that General Vandenberg had taken the matter to Bradley, and that Bradley or Patton would

send a message of regret to the 405th Fighter Group because, as General Weyland pointed out, we "do not want bad feeling[s]." Later that morning, Vandenberg called Weyland about a report from Third Army concerning a P–47 strafing attack on one of its convoys between Thionville and Luxembourg City, asking him to investigate the charge. In this instance Vandenberg identified the 362d Fighter Group as the probable culprit, but subsequent investigation showed the Maulers to be elsewhere at the time of the incident.[72]

In the early evening, Colonel Browne informed Weyland that Generals Spaatz, Doolittle, Patton, and he had conferred that afternoon at Third Army headquarters in Luxembourg City about the issue of army firings on Allied planes and of fighter-bomber attacks on U.S. ground forces and installations. In the first case, they believed the chief culprit to be a rumor circulating widely in the Third Army area to the effect, that in the words of General Patton, "the Germans are flying our P–47s." Besides official refutation, the conferees had no solution to this problem, but they reiterated that there would be no bombing whatever permitted within the bomb line except under control of an air support officer. Air units also needed to do a better job of crew briefing and always rely on radar control. Most interesting and portentous of all, they

From left to right: General Weyland; Col. Roger Browne, XIX TAC chief of staff; Brig. Gen. Homer L. Sanders, commander, 100th Fighter Wing; and General Patton



decided to prohibit all flying operations the following day, January 1, 1945, in the XII and XX Corps areas, where the most recent incidents had occurred. Evidently they thought this would help cool tempers and allow everyone time to review procedures.[73]

Yet friendly fire incidents continued throughout the Ardennes Campaign. In mid-January 1945, it would reach a point where the XII Corps commander wrote personally to General Weyland. He worried that if accidental aerial attacks on his forces continued, relations between the air and ground units would collapse. Only the end of the campaign and the intense flying associated with it seems to have reduced, but not eliminated, the difficulty.[74] By New Year's Eve, 1944, certainly both air and ground leaders were alert to the issue. The fighter-bombers would not fly over the XX Corps area the next day, and Third Army gunners were admonished to be less trigger-happy. The *Luftwaffe* could not have chosen a better time for an air assault against XIX TAC and Third Army installations.

The *Luftwaffe* Responds

At 10:30 a.m. on January 1, 1945, while XIX TAC's forces carefully avoided flying in the XII and XX Corps zones, 15 Bf 109s attacked the Metz airfield. They approached at low-level, "on the deck," in flights of three and strafed the field from all four directions of the compass. Their assault destroyed 20 command aircraft and damaged 11 more, but the Germans suffered severe losses as well: the Metz air defense battery claimed 12 of the 15 attackers; Third Army units reported that they shot down 6 of 10 other fighters over the Metz area during the airfield attack. The fog of battle, however, produced a number of less praiseworthy incidents elsewhere in the Third Army area. In his diary that evening, General Patton noted three P–47s had chased a staff car with General Gaffey, 4th Armored Division commander, into a ditch, while his own Third Army antiaircraft gunners took aim and holed the airplane in which AAF Generals Spaatz and Doolittle were returning to First Army headquarters at Liege, Belgium, after their December 31 meeting that addressed the friendly fire problem![75]

Although the *Luftwaffe* struck only the Metz airfield in the XIX TAC area of France, this attack was part of a coordinated strike of between 750 and 800 fighter aircraft against 16 Allied airfields in Belgium and Holland. The Allies counted 134 aircraft destroyed and a further 62 that required major repair, while German fighter chief Gen. Adolf Galland reported a loss of 220 aircraft in the operation. The *Luftwaffe's* bold New Year's Day raid originally had been planned to begin the Ardennes Offensive. Coming as it did this late in the campaign, the attack provided hard-pressed *Wehrmacht* forces in the Bulge no relief and it further decimated the *Luftwaffe*. Afterward, Hitler directed his attention

Damage caused by the *Luftwaffe* raid on January 1, 1945

to the 6th Army Group front in Alsace. To support the German offensive north of Strasbourg during the first week in January, the *Luftwaffe* diverted between 400 and 500 aircraft from the Ardennes Operation south, opposite the Alsace region. Along with a host of aircraft serviceability problems, bad weather during much of the first half of January prevented the *Luftwaffe* from flying more than about 250 sorties per day in both operational regions.

The poor reaction of air defenses to the *Luftwaffe* raid at Metz troubled Weyland and his staff the most. Despite significant claims against the attacking force, none of his planes on five-minute alert got off the ground and the Ripsaw microwave radar control provided no warning until just a few minutes before the low-flying Bf 109s struck. Although not mentioned, the Y service intercept operation appeared equally ineffective against an enemy that required only six minutes' flying time from German-held territory and came in on the deck under radio silence.[76]

In light of the *Luftwaffe's* tactics, the inability of the air defense units at Metz to respond more rapidly does not seem surprising. Nevertheless, the *Luftwaffe* threat called for immediate countermeasures. At 1:00 p.m. that afternoon, Weyland chaired a conference with his staff to discuss ways to improve the air defense system. The group decided on a number of specific changes, including keeping two flights on air alert and warning all units to be aware of possible repeat air attacks as well as parachute landings. Members of the command needed little encouragement, and the unit histories are replete with stories of one immediate response: the digging of slit trenches to protect personnel against air attack.[77]

Weyland did not want the 368th Fighter Group to make its scheduled move from Juvincourt to Metz until Ninth Air Force had a third air defense battery in place at the latter base. After the Metz attack, it became standard practice for all airfields with two groups assigned to be protected by three air

defense batteries. As for the lack of adequate warning, he wanted General Sanders, the 100th Wing commander, to work with the tactical control group on measures to improve early warning effectiveness.[78]

How active was the early warning radar on January 1, 1945? At the beginning of the German offensive, the MEW radar operated at Morhange, east of Nancy. When Third Army shifted north, however, the radar facility also moved to Longwy, 12 miles southwest of Luxembourg City, to provide coverage over the Bulge. The site was selected by Weyland and key technical officers using maps and a transit. They even had one of the SCR–584 radars set up to check permanent echoes. The expert from the operational research section later stated that the new location gave superb low-level coverage of the target areas and bases, and the command considered it the best of all microwave radar locations on the continent. Yet this move, which began in late December 1944, took five days to accomplish; the new site could not be occupied until January 4. Although the MEW radar's precise status on the morning of January 1 remains unclear, it is likely that it was not completely operational, and other radars with less range had to provide coverage.[79]

Weyland and his staff also addressed a fundamental weakness in the air defense network. The air commander explained that he wanted to examine the possibility of incorporating what Third Army called the Mosel inner artillery zone—the entire army artillery system—into the air force warning net. Significantly, after this incident coordination through the tactical control group improved. Yet problems continued, and air force analysts believed the system could not be entirely effective until all air defense units, including those at the front, could be brought under air force control. On the basis of postwar analysis of this problem, Weyland seems to have had more success than most air commanders. An important Ninth Air Force report, for example, described the controversy between air and ground forces resulting from lack of clear responsibility for AAA in certain areas. It advocated integrating all AAA into the air force defense system as well as air force control of all air defense components.[80]

Weyland did not remain content with improving defensive measures. That evening he urged General Vandenberg to have the Ninth Air Force's medium bombers strike German airfields in the southeast with fighter-bombers to follow later that night or the next morning. The Ninth Air Force commander, however, decided that the "time was not ripe" and suggested that the P–51s be used for the attack as an alternative. He also recommended that Weyland consider operating 361st Fighter Group P–51s farther east and giving P–38s more of the bomber escort mission. Unless the P–51s got more shooting, he said, Eighth Air Force wanted them back. Weyland accepted the proposal, and the 367th Fighter Group P–38s flew escort missions on 10 of the remaining 14 flyable days in January.

The day after this discussion, the 361st Fighter Group flew fighter sweeps along the Rhine in addition to an escort mission. The command, how-

Radar installation established by XIX TAC Signal Section

ever, targeted specific German airfields only on January 5, and the 354th Fighter Group attacked them with disappointing results. The 361st Fighter Group may not have had many opportunities to fly fighter sweeps and area cover missions at that time. It flew escort missions on seven of the remaining operational days in January, and its interdiction and counterair missions occurred largely in the same Rhine and Mosel River region rather than farther east, as Vandenberg had suggested. On the other hand, Eighth Air Force's criticism might have been muted because much of the XIX TAC escort effort supported Eighth Air Force bombing missions.[81]

The discussion of P–38 and P–51 roles reflects the command's concern for the *Luftwaffe* threat as well as the dilemma of escort duty. Although the XIX TAC planned to have the 367th P–38 Group converted to the more durable P–47D, it was not unhappy with the performance of the P–38s in the Ardennes Campaign. Almost exclusively flying armed reconnaissance missions outside the breakthrough area, the P–38s avoided the higher flak concentrations in the Bulge. With five aircraft lost in December and three in January, the group had a lower loss record than any of the command's P–47 groups, and it was second only to the 361st Fighter Group in this respect. Ultimately, the command divided the escort mission between the two groups, while also assigning P–51s to the counterair role and both groups to interdiction missions. Neither flew close support "cooperation" missions until January 22, when the 367th Fighter Group joined a shoot-out at the Dasburg bridge.[82]

Did General Weyland overreact to the surprise attack on January 1, 1945? In hindsight, perhaps yes. At the time, however, air superiority

remained the key mission priority, and doctrine recommended repeating counterair attacks and maintaining "air defenses in the theater…continuously to provide security from hostile air operations."[83] Weyland was especially sensitive about the *Luftwaffe* threat from the time of the Lorraine Campaign, when raids in Third Army's area increased, and Ultra and tactical reconnaissance began observing the buildup at airfields in the Rhine valley. His responsibilities for air defense in the Third Army zone made him particularly anxious to plug possible holes in the defensive system.

On the other hand, Weyland allowed the German air threat to become a key focus in command tactical air planning and operations long after it clearly had become little more than an annoyance. In fact, January 2, 1945, proved to be the last day for which Third Army reported *Luftwaffe* raids of any consequence. Beginning on January 5, army records show only reports of V–1 and Me 262 sightings, but no attacks on Third Army positions. For its part, the *Luftwaffe* appeared in strength on only two additional occasions during the month, once on January 14, and again two days later. In both instances, the action occurred well to the east of the Third Army front, responding to Allied interdiction missions in the Eifel. Moreover, tactical reconnaissance pilots observed the first signs of German withdrawal from the Bulge as early as January 5, and by the second week in January, Ultra confirmed that armored forces were being withdrawn and moved eastward to confront the Soviet offensive launched in Poland on January 12, 1945. In effect, the *Luftwaffe* could be expected to devote even less attention to attacks in the Bulge and, especially, in the Allied rear areas.[84]

Nevertheless, the daily air alert and air defensive patrol missions remained prominent until the end of January. The 405th Fighter Group began patrolling on January 2, with 16 aircraft flying in flights of four throughout each day. Bad weather on all but two of the days from January 3–13, delayed full implementation of the patrol program, but after January 13, patrols flew every flyable day until January 26. Although all but one of the P–47 groups participated, the 405th flew the vast majority. Usually flights of four aircraft carried out the mission, repeating it from three to five times during the day. Seldom did they return to base with anything to show for their efforts. During this period the equivalent of twelve, 12-plane squadrons performed aerial patrol duty and could not be assigned ground support or interdiction missions. Whether these flights would have made a substantial difference in the interdiction program is questionable. Nevertheless, frequent bad weather and competing priorities limited interdiction missions in any case, and argued for devoting maximum emphasis to isolating the battlefield on the few good days available.[85]

Furthermore, given the concern of Weyland and other air leaders about the *Luftwaffe's* continuing potency, it would seem to have been more profitable had they redirected much of this defensive patrol effort into offensive operations by attacking airfields in the Rhine valley. Doing so may have helped fill the gap left by the Eighth Air Force bombardment division, which in the first

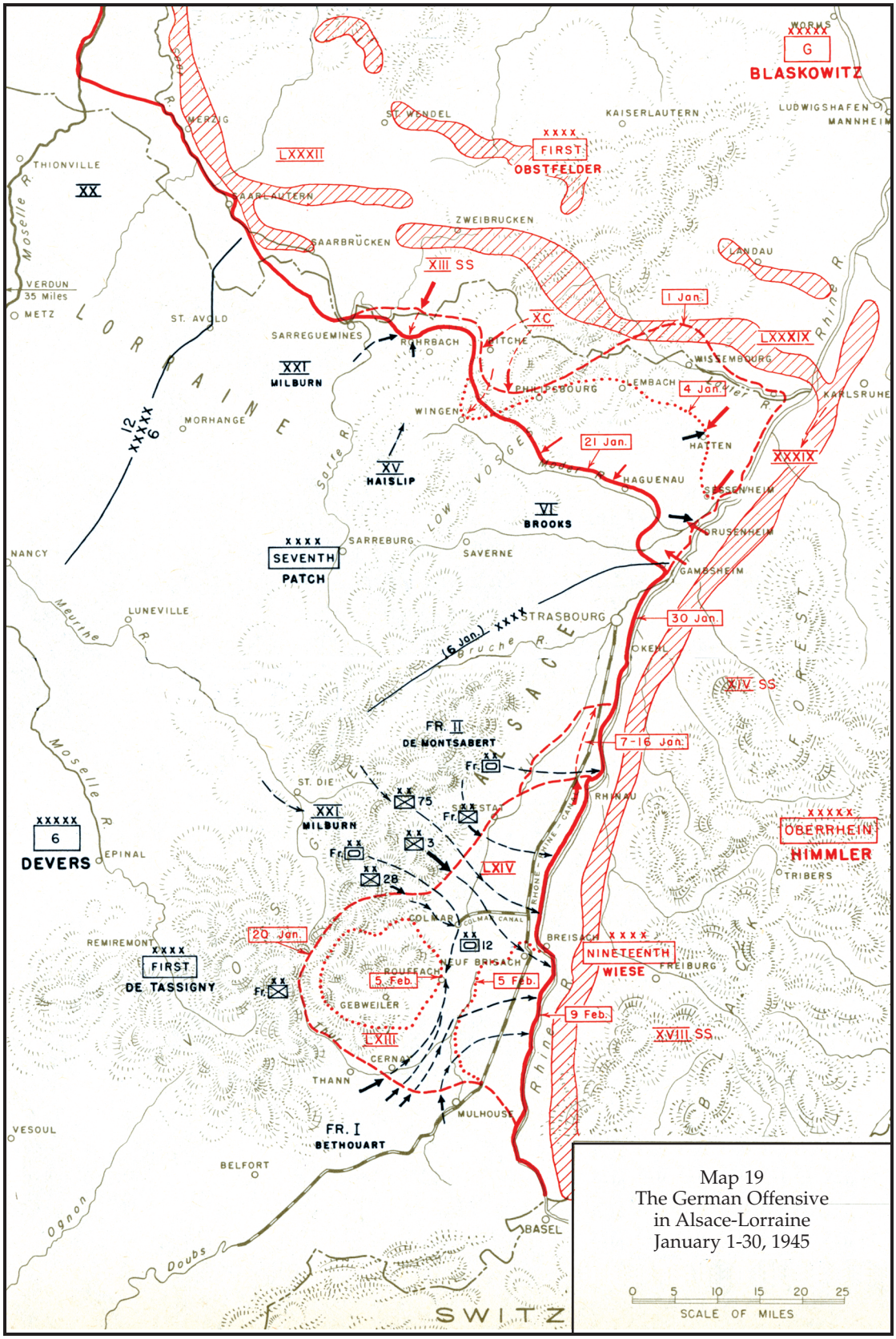
week of January 1945, had been withdrawn from supporting Ninth Air Force to supporting 6th Army Group requirements in its area. Even if the XIX TAC's counterair missions proved uneventful, the fighter-bombers could still strike targets of opportunity. As understandable as General Weyland's concerns were, this diversion of scarce aerial resources does little to enhance his reputation as an otherwise highly capable commander. Weyland, like many others during the Ardennes Offensive, seems to have overcompensated, impelled "by a nervousness far greater than the transient emergency warranted."[86] Although AAF doctrine supported taking adequate defensive measures, in this instance Weyland's use of combat air patrols unwittingly confirmed another doctrinal proposition: an "air umbrella in orbit over friendly forces is wasteful." Certainly aircraft assigned to defensive patrol responsibilities would have been more effectively employed elsewhere after early January 1945.[87]

Consolidating Support Elements and Flight Operations

While providing support to Patton's troops farther south in the Saar and flying interdiction missions, the XIX TAC continued supporting Third Army's slow, difficult drive to link up with Allied troops in the northern half of the Bulge. Although the German drive was blunted by the first of the year, the Allies knew there would be no headlong retreat from the Bulge. Their attention the first week in January 1945, centered on the western Bulge area and the lower Saar (**Map 18**). On Third Army's Bastogne front, VIII Corps continued its attack from the west, while III Corps widened the corridor to Bastogne and fought off counterattacks as it slowly pushed northeast farther into the German flank. On January 3, First Army launched Montgomery's long-awaited offensive against the northern flank of the salient. The best advance occurred northeast of Vielsalm, where the 82d Airborne Division attacked on a six-mile front. Like Patton's drive northward, it made slow but steady progress in the face of dug-in German armor, horrendous ice and snow, and extreme winter temperatures of nine degrees Fahrenheit.[88]

Farther to the south, the Germans launched a diversionary attack on 6th Army Group's front in Alsace-Lorraine in conjunction with the New Year's Day air strike (**Map 19**). Forewarned by Ultra, General Eisenhower, under great pressure from French General De Gaulle to hold the city of Strasbourg, planned to fall back to prepared defenses in the northern sector as French forces defended the Alsatian city. Despite initial German gains, the Allied troops held. Soon neither side found itself strong enough to make any significant progress until the Russian offensive forced Hitler to move several German divisions from the western to the eastern front.[89]

American reinforcements for General Devers's 6th Army Group consisted primarily of increased air support. Ninth Air Force, meanwhile, protested



SOURCE: Vincent J. Esposito, ed., *West Point Atlas of American Wars*, V. 2, Map 64a, (New York: Praeger, 1960)

SHAEF's decision to direct bombers south from the Eighth Air Force heavy bomber division, which had been playing a key role bombing targets in the outer interdiction region, to support operations in the 6th Army Group sector. To analysts at 12th Army Group and Ninth Air Force, "this diversion [to support 6th Army Group] was of secondary or even minor importance, and it was with dismay…[that we]…saw SHAEF transfer top priority for bombardment to that area." From the standpoint of the Ninth Air Force and 12th Army Group, this diversion seriously threatened the success of their interdiction program. At the same time, Vandenberg asked Weyland on January 2 what he could spare for XII TAC, and that day the XIX TAC commander diverted four squadrons to help in the Saar and Palatinate regions with armed reconnaissance missions.[90]

The Ninth Air Force air plan continued to target enemy armor and pursue an elaborate interdiction program focusing on bridges and supply centers. Weyland's forces had just begun flying intensive interdiction against bridges on the first two days of January 1945 when freezing drizzle and rain, along with a 600-foot overcast and 1–2 miles of visibility, shut down operations for two days. Between January 3 and 14, the XIX TAC pilots could fly on only two days; they flew 191 sorties on January 5 and 325 on January 10. The remaining days were socked in. The heavy snow that arrived on January 3 helped make the January snowfall in northern Europe the heaviest in 175 years. All told, the XIX TAC had only seven operational days in the month compared to 13 for December. Under these conditions it became impossible to maintain a consistent interdiction effort.[91]

On January 5, 1945, operations continued with the 362d Fighter Group supporting III Corps and the 406th Fighter Group backing VIII Corps, while the command flew four armed reconnaissance missions for XII TAC. That day also witnessed one of the most spectacular flights of the Ardennes period. General Patton had been concerned for some time about the XII Corps' right flank and the XX Corps' area opposite Saarburg, in the Merzig-Saarbruecken region. Reports appeared with increasing frequency that German engineers had a major bridge-building program underway in this thinly held sector. To study the strong points and bridges and to assess the severity of the threat, the Third Army commander asked for photographs of the area.[92]

Thus a low-level F–5 (P–38) dicing run in a high-threat area was ordered. Capt. Robert J. Holbury of the 31st Photo Reconnaissance Squadron volunteered to fly the mission despite a ceiling of less than 600 feet of solid overcast. After a particularly hazardous flight that included flying below 25 feet and dodging high-tension wires as well as flak, Holbury returned on one engine, with a vertical stabilizer shot off and with his aircraft peppered by shell holes. He also returned with 212 superb pinpoint and oblique photos showing three traditional bridges, a pontoon bridge, and barges strapped together. Although this threat did not require reinforcing the XX Corps front, Third Army wanted the German bridgework destroyed whenever the weather permitted.[93]

After an Ultra briefing on January 9, Patton became increasingly concerned about Merzig-Saarbruecken as a possible site of another major German offensive, and General Weyland agreed to have his fighter-bombers attack the region as soon as weather permitted. Consequently, when the weather improved on January 10, the 362d Fighter Group flew three squadron missions against the bridges, piers, and barges that had been photographed on January 5. The pilots achieved only mediocre results, and though claiming one direct hit and a number of approaches damaged, the bridges remained serviceable. Soon a spirited contest developed between Weyland's fighter-bombers and Ninth Air Force medium bombers to see which group could knock out the heavily defended bridges.[94]

General Weyland took advantage of the nonflying period to move his headquarters closer to the action. Procedures called for moving in two stages in order to maintain communications. Weyland and the initial A headquarters party arrived in Luxembourg City on January 8 where they set up communications with Third Army and Ninth Air Force headquarters' command posts and Weyland's units early the following morning. Colonel Ferguson, however, remained at Nancy and maintained control of operations throughout the ninth. That evening he closed up shop and moved his B party to Luxembourg the next day. The plan worked to perfection. The absence of flying made the communications transition much easier because there were no flight operations to handle. Now Third Army and the XIX TAC had their air and ground headquarters again completely collocated.[95]

On January 11 and 12, 1945, atrocious winter weather forced the command to cancel most missions. During this period Weyland used the time to good advantage. On January 10, he learned that his command would receive a radar ground-control approach system by February 1. (His initial request was made in early October 1944.) One of the specialists, an SCR–584 expert, worried about the command's slow progress with the two modified SCR–584 systems, termed battle area control units (BACUs), which it had received in late December. At this time the command's BACUs functioned only as navigation devices. Operators of the two systems worked with the air liaison officers assigned to Third Army's XII and XX Corps. The system vectored close air support flights either to a target selected by the liaison officer at corps headquarters or to a point forward where the air control officer operating with the ground unit took control and directed the attack.[96]

Only in February 1945 did the command begin what it referred to as last-resort blind bombing with the SCR–584 radar, after it received two additional sets that had been modified earlier for ground control intercept operations. The SCR–584, however, proved difficult to operate effectively. As one of the research technicians assigned to the command stated, "picking up the correct aircraft formation, locking on and staying locked on, and controlling the aircraft through a good bomb run was difficult and the crews and controllers had insufficient training to do the job well."[97]

Dicing mission photo of the Saar River

After much practice, the system proved useful as both a navigation and an area blind bombing aid in late February and March, when static conditions and little movement prevailed. After March 1945, however, fast-paced mobile conditions would make it impossible for the SCR–584 radar equipment to keep within range of the bomb line, and Weyland ordered it withdrawn. In fact, the command continued to prefer the MEW radar, especially after it received a close-control unit for the system at the end of December 1944. Along with its ease of transport and longer range, microwave radar procedures proved far simpler for the controllers to master.[98]

On January 12, 1945, Weyland accompanied General Gay on a visit to units of VIII Corps and to the headquarters of both VIII and III Corps. Weyland and his officers visited army commanders in the field periodically to discuss air-ground issues, particularly as part of the joint planning process and to promote good relations. In this instance, Weyland discussed plans for future operations with Generals Middleton and Milliken, who reported that enemy counterattacks had diminished amid more signs of withdrawal.[99] Indeed, by January 15, 1945, VII Corps in the north had cut the key St. Vith-Vielsalm road, and Patton's forces and First Army units had also severed the St. Vith-Houffalize road and converged on Houffalize (**Map 18**). To the east, III Corps had taken Wiltz and now approached the Clerf River line, while XII Corps still battled for the town of Echternach and exerted pressure on the German line of

withdrawal. Although German forces fell back on St. Vith, they continued to counterattack fiercely. Allied forces also confronted the by now customary impediments of heavy snow and ice, mines, road blocks, and booby traps. Nevertheless, the outlook appeared promising. Intelligence analysts predicted that the Germans would attempt to move the armored forces out of the Bulge for duty in either Alsace or on the eastern front and replace them with infantry units. If so, the Allies expected to turn the retreat into a rout.[100]

Clearing the Bulge

During the last half of January 1945, the XIX TAC enjoyed one of its most successful operational periods of the entire campaign. A month after the Germans began the Ardennes Offensive, the Allies finally had them on the run. Although Ultra picked up the first signs of a German retreat on January 8, only when the weather cleared on January 13, did the Allies fully realize that the Germans had decided on a general withdrawal from the Ardennes salient.[101] The question became whether German delaying tactics and the winter weather could prevent the Allies from isolating substantial parts of the enemy's forces before they could withdraw into the Eifel. The retreating Germans had to travel during daylight hours on main roads that became increasingly congested. Fleeing under these conditions, the *Wehrmacht* offered ideal targets to Weyland's fighter-bombers. Four consecutive days of good flying weather provided more than one-third of the month's total claims of 10,525 ground targets destroyed or damaged in operations reminiscent of the previous summer. In terms of the number of sorties flown, January 14 was, in the words of the XIX TAC commander, the "biggest day since summer." His command flew 61 missions and 633 sorties both within and outside the breakthrough area for what proved to be the second-best claims day of the month. With the 354th and 406th Fighter Groups seeing most of the action in the III and VIII Corps areas, the remaining groups flew armed reconnaissance missions against bridges and command posts throughout the Eifel region. The day's score included 410 motor vehicles, 174 railroad cars, and 45 buildings destroyed.[102]

Although the command's claims remained unsubstantiated, the effort that resulted in them nevertheless contributed significantly to the Allied cause. The coordination between ground and air that occurred during this four-day period, and between reconnaissance and fighter-bomber aircraft and artillery counterflak units, reached a new level of effectiveness. One of the best examples of this teamwork occurred on January 14, 1945. Two F–6 (P–51) pilots of the 12th Reconnaissance Squadron, flying an artillery adjustment mission at Houffalize, spotted 50 armored vehicles entering the city. After observing good results from the artillery fire, they called the tactical control group, which vectored a squadron of 354th Fighter Group P–47s to the scene. The reconnais-

sance pilots then led the fighter-bombers to the targets and directed artillery counterflak fire on enemy gun positions while the P–47 pilots completed their bombing runs. During the ground advance, XIX TAC fighter-bombers again charted the way from village to village in operations reminiscent of the Lorraine Campaign.[103] Although the type of teamwork displayed on January 14 occurred periodically in France and more frequently during the Lorraine fighting, by early 1945 it had become commonplace among all the tactical air and ground commands. When First and Third Army linked up at Houffalize on January 16, Third Army gave much of the credit over the previous three days to the air support of the airborne village destroyers.

The only significant variation in aerial operations appeared in the ordnance loads. By this time 500-lb. incendiary and 100-lb. white phosphorus bombs had been added to the inventory. The fighter-bombers dropped both napalm and incendiary bombs in record numbers, especially during the five days of victory weather in December. Often armorers replaced the fragmentation bomb with a 500-lb. general purpose bomb that was fuzed to detonate instantaneously. It combined good fragmentation effect with outstanding shock effect and proved to be the best answer for concealed armor, vehicles, and personnel. Later, with the enemy on the run in the open, fighter-bombers flew strafing missions loaded only with .50-caliber ammunition.[104]

On January 15 and 16, 1945, the command focused on attacking German front line troops in the Bulge and on any movement along the road and rail networks leading out of the salient. Except for the heavily defended Saar River bridges, which continued to defy destruction, XIX TAC pilots achieved impressive results. The overall objective remained to isolate the battlefield and disrupt any attempt at orderly withdrawal. Colonel Hallett, the command's intelligence officer, developed his own interdiction target plan to supplement the Ninth Air Force target listing. It proved especially useful when aircrews needed secondary targets to attack.[105]

The intense effort during the four-day period from January 13–16 brought out the hard-pressed *Luftwaffe*. With 14 German aircraft claimed destroyed and 3 more damaged, the sixteenth proved to be the command's best day of the month in the air against the *Luftwaffe*. It lost five of its own in these encounters, an improvement over the results of two days earlier when it experienced 11 losses in air combat. The 368th Fighter Group, with six losses, suffered the most. On that day, some 50 Bf 109s and FW 190s attacked ten aircraft from the 397th Fighter Squadron returning from an armed reconnaissance mission near Neustadt. Normally the American fighters managed to out-duel the *Luftwaffe* even when severely outnumbered and surprised. During the Ardennes Campaign, however, American pilots reported *Luftwaffe* aviators fought aggressively and often with greater skill in defense of the homeland. Although these reports referred primarily to the first two weeks of the Ardennes Offensive, even in mid-January, after the transfer of 300 aircraft to

the Russian front and the increasing use of inexperienced pilots, the *Luftwaffe* could still mount an occasional large and dangerous foray.

In the January 16 incident, 397th Fighter Squadron pilots apparently became complacent and violated one of Weyland's cardinal maxims for air combat: "The iron law of a flight is that the element will be maintained, for the lone bird is the dead bird." If, as some commentators explained, the enemy air attacks on January 13 and 16 represented the last desperate flailing of a *Luftwaffe in extremis*, they also reinforced Weyland's belief that *Luftwaffe* capabilities required him to retain his air defense patrol missions unchanged. As events transpired, these would be the only occasions during the month when the *Luftwaffe* appeared in strength to menace Allied fighter-bombers.[106]

On January 17, 1945, the XIX TAC historian asserted that the "Belgian Bulge had been reduced to a mere bump."[107] Although correct, judging from the map, another week passed before the Allies eliminated the Bulge completely. The German position admittedly had become desperate. During this last phase of the battle, German forces made every effort to disengage and withdraw within the Siegfried Line defenses, hoping to hold Allied forces in place in the west while the Panzer forces shifted to the east. The British, American, and French forces, of course, remained equally determined to prevent their escape.

After the two U.S. armies met at Houffalize, First Army units pressed on toward St. Vith. On Third Army's front, VIII Corps and III Corps forces forged

German Bf 109

Troops of the 4th Armored Division in the Ardennes (above); 101st Airborne Infantry Division troops move through Bastogne towards Houffalize (below); Enemy tanks and motor vehicles destroyed by Ninth Air Force fighter-bombers (facing page)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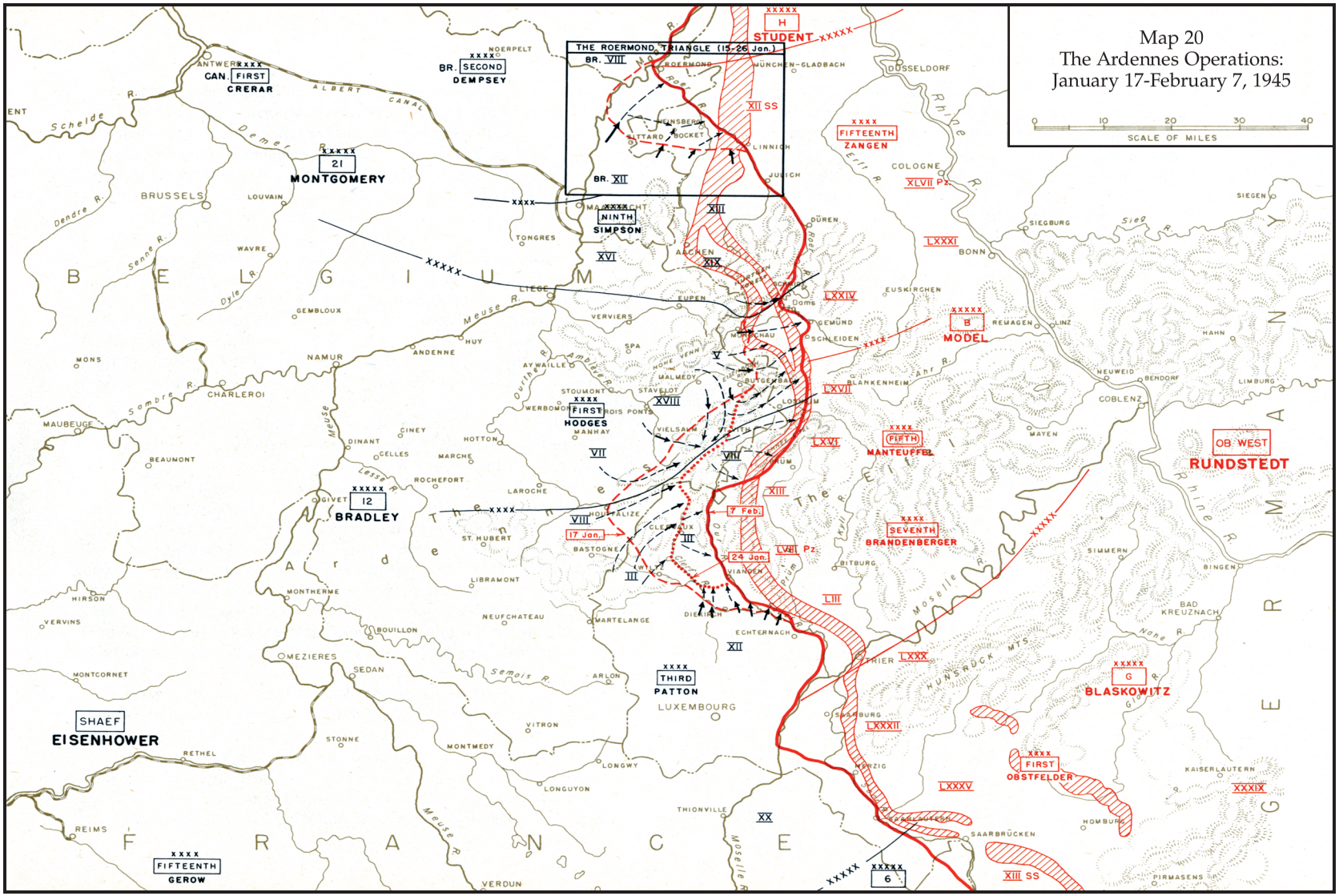
Staff, XIX Tactical Air Command

ahead toward the Clerf River with their goal the Our River that separated Luxembourg from the Eifel (**Map 20**). To create more pressure on the southern shoulder and narrow the escape route at the base of the breakthrough area, XII Corps started an offensive on January 17 in miserable weather and without the protective shield of air power. Air support for the corps' right flank became a major priority, and when the weather cleared on January 19, Weyland's forces flew five armed reconnaissance missions in the Echternach area and three more in the Trier area. By January 20, XII Corps units came within two miles of Vianden at the international border between Luxembourg and Germany. Bad flying weather on January 20 and 21, however, once again restricted the level of air support to two armed reconnaissance squadron flights near Trier. Meanwhile, as Patton had supposed, XX Corps encountered a determined German counterattack against the 94th Infantry Division at Saarlautern. In this situation, corps artillery provided most of the close support firepower, while the 365th Fighter Group contributed by flying armed reconnaissance along the Saar River from Saarbruecken to Merzig.[108]

General Weyland spent January 19 and 20 visiting his units before returning to Luxembourg City the next day. There he discussed current operations and force movements with General Quesada and Maj. Gen. Samuel E. Anderson. At this meeting, the air leaders decided to transfer the 365th Fighter Group back to the IX TAC, and the 361st Fighter Group to an Eighth Air Force wing. This decision to readjust unit strength certainly reflected the confidence the commanders had in the current state of the air war. Weyland explained to his colleagues that he also intended to move the 406th Fighter Group farther forward to replace the 365th Fighter Group at Metz, and likewise, to move the



SOURCE: Vincent J. Esposito, ed., *West Point Atlas of American Wars*, V. 2, Map 63, (New York: Praeger, 1960)

367th Fighter Group to St. Dizier to replace the departing 361st Fighter Group. None of the moves, however, transpired before the end of the month, after the Ardennes Campaign ended.[109]

For its part Ninth Air Force sent medium bombers and every fighter-bomber available against bridges along the Rhine and Mosel rivers, but especially those over the Our River, at the point of initial German penetration into Belgium. With the enemy retreat accelerating and Allied ground forces working to narrow the escape routes, the vital Our River bridges became the focus of Ninth Air Force attention.[110] On January 22, medium bombers obliterated the approaches to the Dasburg bridge, creating a monumental bottleneck for the Germans, and a magnificent opportunity for Weyland's fighter-bombers. An unexpected break in the weather on January 22 enabled the command to fly 57 missions and 627 sorties primarily against clogged traffic west of the Our River. At 1:00 p.m., reconnaissance pilots reported heavy transport traffic in the Bulge in front of XII Corps, and every available fighter-bomber flew to the area with reconnaissance pilots leading the way. Weyland, on hearing this news, informed Generals Vandenberg and Patton of the evidence of a general withdrawal. In the words of the command intelligence officer, "the last remnants of the Ardennes bulge [were] collapsing like a punctured tire."[111]

Flying four missions in support of the 4th Infantry Division, the 368th Fighter Group achieved the day's best score. It, too, reported that the destruction of the Dasburg bridge had created a massive traffic jam on the west side of the Our River. Pilots said the congested scene provided a better shooting opportunity than the one encountered in the final closing of the Falaise Gap. The 368th Fighter Group was joined by squadrons from all other groups except the 406th and 361st Fighter Groups that were attacking rail targets near Trier, and the 365th, which supported the 94th Infantry Division against the ongoing German counterattack. Only the five planes lost from the 362d Fighter Group dampened the day's enthusiasm.[112]

Aerial claims processed on January 22, 1945, totaled 1,177 trucks, tanks, and other motor vehicles destroyed and another 536 damaged, twice the figure for the previous high day on September 1, 1944. The XIX TAC's record day for claimed destruction of enemy transportation became a major news story picked up and broadcast by the BBC and NBC. Congratulatory messages arrived immediately from Generals Arnold, Spaatz, and Vandenberg.[113] General Weyland told his officers and airmen:

> For information on who did it, look in your own ops flashes. Germans claim great strategic withdrawal with only one army NYR [not yet reported]. Yesterday was [a] beautiful example of tactical cooperation between recce, fighter control, ground control and fighters. I am plenty proud of you all.[114]

The good hunting continued through the morning of January 23, before snow and low ceilings reappeared. Of the four groups not grounded for weather, three returned to the scene of the slaughter for even more impressive claims. Because the intensity of the flak in the Dasburg area now proved to be some of the heaviest in the Bulge fighting, the 354th Fighter Group reported that it had to bomb at 5,000 feet. Meanwhile, the 365th Fighter Group again flew in support of XX Corps, conducting armed reconnaissance in the Trier and Neunkirchen areas and flying two air patrol missions near Metz.[115]

A special mission to test the efficacy of a new reconnaissance target-spotting method set up by General Weyland proved less successful. During the euphoria of January 22, he proposed that his reconnaissance aircraft lead 16 A–26 Invaders to strafe targets at low-level in the Dasburg area of the Bulge. A replacement airplane for the twin-engine Douglas A–20 Havoc, the Douglas A–26 medium bomber had arrived in the European theater late in 1944. On January 23, Lt. Howard Nichols of the 15th Tactical Reconnaissance Squadron rendezvoused with the first flight of five bombers at Luxembourg and led them to the target area 28 miles to the north. The units arrived too late to master the weather and the flak, and two of the bombers took hits and crashed behind Allied lines. Nichols returned to lead six more bombers back, but he promptly observed two more shot down and several others severely damaged by flak. The mission was a disaster. Although officials knew the A–26 should not be risked in low-level operations against heavily defended targets, Weyland apparently believed that surprise and good work by his reconnaissance "spotter" aircraft would overcome the problem.[116]

Even though the experiment of using light bombers on a low-level mission failed in this instance, the reconnaissance pilot performed as planned. Reconnaissance pilots not only served as the eyes of the ground forces and the intelligence section, they also functioned as airborne controllers much like the Horsefly light-plane controller operation that Americans first developed in the Italian theater. There the largely static front proved more conducive for light planes employed in this role. In northern Europe, Weyland and his fellow commanders preferred to rely on fighters for tactical reconnaissance and airborne control operations.[117]

During the next six days, from January 23–28, 1945, Allied ground forces slowly overcame tenacious German defenses to close up to the Our River and, on January 26 created a bridgehead on the east bank inside Germany. The XIX TAC operations continued with major emphasis on interdiction in the Eifel near Prum and close air support for XII Corps troops facing German forces attempting to flee across the Sauer River. As usual, inclement weather limited the sortie rate and prohibited operations altogether on January 27.[118] On January 28, American patrols crossed the Our River in force, and General Weyland recorded that the "reduction of the Ardennes was officially completed." The next day,

he said, XIX TAC would resume the offensive. Four days earlier he with Patton, his staff, and corps commanders had attended a conference at Third Army headquarters to discuss forthcoming offensive operations. Together, the XIX TAC–Third Army team prepared for the final drive.[119]

Ardennes in Retrospect

Reflecting on the Ardennes Campaign, the Ninth Air Force historian declared that "here, as never before, was the chance to apply sound principles of tactical air power."[120] He referred to the demonstrated deployment and employment of tactical air power quickly, in force, in an emergency. General Bradley echoed these sentiments in a report of his own. "Aircraft claims during that period [Bastogne] are impressive," he said, "not alone for the havoc created, but because they demonstrate the potential flexibility which permits the rapid massing on a limited target area."[121] Fighter-bomber response, indeed, proved to be swift, concentrated, and instrumental in helping first to blunt the offensive, then to force German troops back, beyond the Our River.

The aerial response, in fact, seemed drawn directly from a textbook and performed to perfection. The early days of the assault, however, reflect a somewhat less organized reaction to the crisis. With troops overrun or in retreat and the entire Allied center in danger of collapsing, air leaders faced a dire emergency. They responded on December 16 and 17, 1944, without FM 100–20 (1943) in hand for guidance. The theoretical priorities of air superiority, interdiction, and close air support were set aside in favor of bringing all available fighter-bombers to bear as quickly as possible in bombing and strafing the enemy. This is the very essence of tactical air power's flexibility. If the *Luftwaffe* put in an appearance, so much the better. During the course of the bad weather before December 23, the planners had time to prepare an air plan for victory and give proper attention to allocating effort among the three missions.

The initial reaction of General Weyland and his command also demonstrated just how much the applied doctrine, organization and procedures, and experience of the airmen had developed since the North African Campaign. In the Ardennes' crucible, Weyland's forces demonstrated the maturity tactical airpower had achieved. With hardly a pause, he and his staff redirected command forces from a focus of operations along the Siegfried Line to the Ardennes region with the smoothness of a well-functioning machine. Airplanes flew north to cover Patton's fire brigade and east to harry German supply lines, while Weyland resurrected his X-Ray liaison command echelon to ensure close coordination with the ground forces. Meanwhile, he marshaled support elements to make an extraordinary effort in maintaining the air assault. The urgency of the situation proved sufficient incentive to elicit an outstanding performance from all his forces up and down the line.

Certain problems and constraints could never quite be overcome. The winter weather made flying impossible at crucial points in the battle and it prevented a consistent harassment of enemy communications. It also delayed the well-orchestrated interdiction program to isolate the battlefield. Winter weather magnified the major weakness in the Allied tactical air arsenal—the night fighter force. This small, if heroic group of night flyers simply did not possess the assets or technology needed to consistently interrupt German movements of supplies and defensive reinforcements during the long hours of darkness. Without a significant night operational capability, the Ardennes Offensive was prolonged and the flak concentrations became the most hazardous of the war for Allied flyers. Air leaders understood the deficiency, but without sufficient resources little more could be done before the advent of the all-weather, fly-by-wire fighter-bomber of the future.

The winter weather and the urgency of the defensive operation also provoked friendly fire from anxious Allied personnel on the ground and in the sky. General Weyland acted promptly to improve communications between air and ground personnel, but better coordination among air defense agencies could only limit the problem as long as the flying hazards and tension associated with action in the Bulge continued. Even with better coordination, wartime conditions ensured that the friendly fire problem continued throughout the campaign, if at a lower level of concern.

As always, teamwork and cooperation among leaders of goodwill ultimately prevented any serial recurrence of the worst of the friendly fire incidents, as they did most other problems. Clearly the mutual respect and understanding between Generals Patton and Weyland continued unaltered. From the start of the battle it was a joint operation and remained so. Weyland or his X-Ray chief attended every Third Army morning briefing, and the integrated combat operations staff ensured continued joint planning and operations. Teamwork and cooperation also occurred in the combined operations office at corps and division level, as well as in the smooth and effective coordination that developed among and between reconnaissance and fighter aircraft, ground controllers, and artillery units. Moreover, Weyland always gave first priority to air cover for Patton's army, whether or not formal doctrine favored such extensive measures. Patton, in turn, never interfered with the basic air plan to support his forces in the Bulge and participate in Ninth Air Force's interdiction program. Only occasionally did the army commander request special reconnaissance or air support for troops in trouble, and Weyland's forces always responded.

Certainly, the XIX TAC could respond to Third Army requests more effectively with eight fighter-bomber groups instead of four. Unlike conditions in the Lorraine Campaign, Weyland possessed a force capable of decisive intervention in the battle zone. Yet, his responsibilities correspondingly increased, too. While three groups always provided close air support, three

Destroyed self-propelled gun near Dasburg, Germany

more concentrated on interdiction. This left two groups to fly escort, counterair, defensive patrol, and to strike the pinpoint targets that seemed to need attention on a regular basis. These six aerial assignments could and did change, but they limited the concentration of effort the command could apply to any single one.

Ninth Air Force, of course, continued to decide major force allocations. In the official recounting of the campaign, its historian reflected on the constant challenge of balancing competing priorities:

> There was always the difference of opinion on the tactical employment of air power. A request might call for immediate cooperation against a close target when overall commitments dictated continuation of a longer-range program. Many requests were beyond [our] capabilities.[122]

In hindsight, Ninth Air Force analysts concluded that perhaps too much initial effort had been devoted to bomber escort duties at the expense of close support. One might also question whether the airmen, given the intelligence information at hand, accorded more attention than the threat warranted to

potential *Luftwaffe* attacks after the German drive had been blunted. If the actions of the XIX TAC commander clearly reflected the conventional wisdom of contemporary airmen, that wisdom ordered numerous aircraft on air combat patrol that otherwise might have been applied to offensive missions. Whatever the decisions on air priorities, the Allied tactical air power available then in northern Europe provided sufficient concentration of force for decisive intervention on the battlefield.